

**EXHIBIT C**



FTI Capital Advisors, LLC is a member of FINRA/SIPC.

# Accounts Receivable and CLT Report

***November 15, 2014***

***Presented To:***



# Disclaimer

---

## **DISCLAIMER AND CONFIDENTIALITY**

The information contained herein (the "**Information**") has been provided and prepared by the Puerto Rico Electric Power Authority ("**PREPA**" or the "**Company**") and is in draft form subject to further discussions and revisions. No representation or warranty, express or implied, is made by the Company or its advisors as to the accuracy or completeness of the Information, that has not been independently verified. The Company and its advisors shall have no responsibility or liability for the accuracy or completeness of the Information, any errors, inaccuracies or omissions in the Information or the consequences of any reliance upon the Information. Without limitation of the foregoing, no representation or warranty, express or implied, is made by the Company or its advisors as to the accuracy or completeness of any forecasts or projections contained in the Information. Nothing contained in the Information may be relied upon as a promise or representation as to the future. The Information does not constitute an offer or solicitation to sell or purchase securities. Neither the Company or its advisors shall have any liability, whether direct or indirect, in contract or tort or otherwise, to any person in connection with the Information.

Projections are included in the Information. Such projections have not been examined by auditors. The projections and other material set forth herein contain certain statements that are "forward- looking statements". These statements are subject to a number of assumptions, risks, and uncertainties, many of which are and will be beyond the control of the Company including, among others, availability and timing of liquidity sources, availability of supplies and supplier financing, changes in general economic, political, governmental and business conditions globally and in Puerto Rico, the Company's ability to achieve cost savings, changes in interest rates, changes in inflation rates, changes in exchange rates, changes in fuel prices, changes in business strategy and various other factors. These statements speak as of the date indicated and are not guarantees of future performance. Actual results or developments may differ materially from the expectations expressed or implied in the forward-looking statements, and the Company undertakes no obligation to update any such statements whether as a result of new information, future events or otherwise.

This report is provided solely for PREPA's and its lenders' use in understanding certain issues related to accounts receivable, collections and CILT. It is not intended, nor should it be used, for any other purpose.

The Information does not constitute an offer or invitation to purchase or subscribe for any shares or other securities of the Company and neither any part of this document nor any information or statement contained therein shall form the basis of or be relied upon in connection with any contract or commitment whatsoever. By receiving the Information, you agree to be bound by the foregoing limitations.

## Table of Contents

---

<b>I.</b>	<b>Executive Summary</b>	<b>6</b>
<b>II.</b>	<b>General Clients</b>	<b>22</b>
<b>i.</b>	<b>General Clients – Detailed Recommendations</b>	<b>33</b>
<b>III.</b>	<b>Government Receivables</b>	<b>66</b>
<b>i.</b>	<b>Review of Top 12 Government Accounts</b>	<b>75</b>
<b>IV.</b>	<b>CILT</b>	<b>88</b>

## Limitations of Report

---

- This report is not intended to be a comprehensive review of the entire meter to cash program, nor make recommendations related to items that will most likely be resolved in conjunction with the development of PREPA's business plan. Specifically, FTI Capital Advisors, LLC ("FTI") did not perform a comprehensive review of:
  - PREPA's meter strategy and the cost-benefit analysis of investment in next generation meters
  - PREPA's rate structure
  - PREPA's theft reduction program
  - Customer service staffing levels
- Further, FTI limited its review of the Contributions in Lieu of Taxes ("CILT") program to the accounting for CILT, a review of applicable law, and benchmarking against other U.S. public power utilities
  - While FTI made observations regarding CILT, given the links between rate structure and CILT, the ultimate structure of both of these items is more appropriately analyzed, negotiated and resolved in conjunction with the development of the business and recovery plans and, thus, specific recommendations regarding changes to the structure of CILT have not been developed
- As contemplated by the Forbearance Agreements, this report focuses on actions and initiatives to enhance collections, and does not focus on cost savings initiatives

## A Note on Numbers

---

- PREPA has differences in its accounts receivable balances for financial reporting purposes and for operational reports utilized by customer service
  - Some of these differences relate to certain adjustments that are made for financial reporting purposes. Others result because customer service reports are meant to reflect actual balances billed to customers whereas financial reporting includes accruals for various items that have not yet been billed to clients
    - These reports can also vary based on the timing of when they are run and the entries that have been recorded at that point in time
  - PREPA does not in the ordinary course of business reconcile these two sets of reports and has not fully reconciled these amounts for the September 2014 data used in these reports
- Unless otherwise noted, throughout the report FTI has primarily utilized the customer service reporting due to the variety of reporting options and data analytics that are available from this data set
  - As such, in this report there may be variances in the accounts receivable balances between analyses. FTI has reviewed these variances and does not believe that they are material to the findings of the report



FTI Capital Advisors, LLC is a member of FINRA/SIPC.

# Executive Summary

## Introduction

---

- This report has been developed to comply with section 5(h)(xi) of PREPA's bondholder forbearance agreement and section 5(g)(xi) of PREPA's Citibank and Scotiabank forbearance agreements
- This report summarizes FTI's observations resulting from analysis, interviews and other information collected by FTI. The information contained in this report is based on data provided by PREPA, interviews with PREPA employees, and publicly available information
- In addition, this report includes FTI's recommendations to address the issues raised in the course of FTI's work
- The decisions as to whether to implement such recommendations, and the manner in which such implementation may occur, rests with the management of PREPA. While certain recommendations may be implemented in the short term, others require further evaluation to determine their suitability in the context of the overall restructuring and public policy



## Summary of Work Performed

---

- As required under the Forbearance Agreements, FTI prepared an analysis of PREPA's collections, government accounts receivable, and CILT programs and made recommendations with respect to these items, along with a timeline for potential implementation
- FTI focused on three major areas:
  - Current practices in collection efforts for **general clients'** accounts receivable and recommendations regarding initiatives to improve collections
  - A review of **Puerto Rico government agencies'** and **public corporations'** receivables and collections efforts
  - An analysis of **CILT**
- In performing this work, FTI:
  - Interviewed PREPA management
  - Conducted numerous interviews with PREPA personnel in customer service, IT, finance, and legal
  - Visited the call center and a commercial office to review operations
  - Reviewed documented procedures
  - Reviewed and analyzed historical financial and operational information of PREPA
  - Analyzed available public financial information regarding public corporations
  - Prepared benchmarking analyses on comparable utilities
- This report summarizes FTI's observations and recommendations

## Scope of AR Report

**PREPA's accounts receivable balance totaled \$1.75 billion as of September 30, 2014. The major components that make up that balance and will be covered in this report are summarized below:**

- **General clients** – includes residential, commercial, and industrial energy users. Section II of the report examines billing and collection issues associated with these clients, and their cash flow implications
- **Government** – includes receivables from municipalities, public corporations, Puerto Rico government agencies, and federal agencies with locations in Puerto Rico
  - Municipalities participate in the CILT program. Section IV of this report describes the CILT program, its accounting/legal treatment, and the implications for PREPA.
  - Receivables from other government entities are discussed in Section III

**Other items included in AR but not covered directly in this report, include:**

- **Recoveries under fuel adjustment clause** – These are unbilled amounts of fuel surcharges, which are charged to customers based on the rate formula
- **Unbilled services** – Amounts accrued but not yet billed. PREPA has 20 billing cycles per month
- **Allowance for uncollectible accounts** – Accounting reserve for amounts deemed unlikely to be collected
- **Claims receivable from insurance companies & other**
- **Advances to irrigation system**
- **Accrued interest**
- **Other**

<b>PREPA Accounts Receivable - September 2014<sup>1</sup></b>	
(\$ in thousands)	
General clients	\$ 942,620
Recoveries under fuel adjustment and purchased power clause or (over) billed	40,488
Unbilled services	219,261
Allowance for uncollectible accounts	(270,791)
<b>Total general clients</b>	<b>931,578</b>
Government, including current and non current	757,690
Claims receivable from insurance companies & other	37,814
Advances to irrigation system - net	20,278
Accrued interest	5,290
Other	2,078
<b>Total accounts receivable</b>	<b>\$1,754,728</b>

<sup>1</sup>Accounting data based on preliminary September monthly report

## Customer Service & Collections – Positive observations

**Although this report necessarily focuses on areas for improvement, FTI made many positive observations. Some of the notable ones are highlighted below:**

- **Meters**
  - AMR installs at 95%+ is favorable
  - Capture of daily meter reads for data analysis/trending
- **Billing**
  - Implemented a 5-day reduction for severance (55 to 50)
  - Informative data available to clients on PREPA website
  - Good client acceptance of eBill media
  - Bill printing center operates well and has backup redundancy
- **Pay Programs**
  - PREPA offers numerous pay methodologies (7+)
  - 10% incentive for automatic debit pay
- **Metrics**
  - Customer service metrics reported to the executive team monthly
  - Metric package includes some of the critical measurements
- **Collections**
  - Positive results from negotiations with wholesale clients
  - Understood as the top priority across regional management team
- **Commercial Offices**
  - Two smaller districts were closed (consolidated)
  - The queuing system adds order to the waiting process
  - Pilot programs for payment kiosks to provide self-service for customers
- **Call Center**
  - Successful pilot program to outsource a portion of the call center
- **Field/disconnection services**
  - The target of 24-hour service connections is typically >96%
- **Resources**
  - Employees provided absolute dedicated, professional support
  - Sense of partnering and shared commitment to assist in the efforts
  - Data requests, report generation, documentation and other activities were supported timely and consistently
  - Special thanks to the personnel in customer service, and information services, as well as other groups who provided their continued support

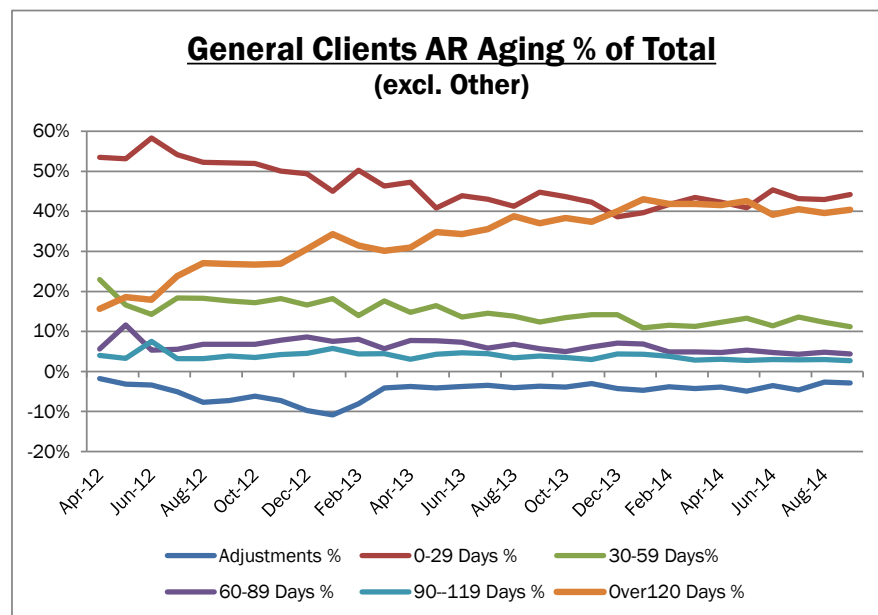
***PREPA has made progress in several important areas***

## General Clients – Key Issues

- There are approximately \$950 million of general clients' accounts receivable, with over \$500 million of the accounts receivable aged 120+ days

(\$ in millions)	Aged AR Balances (Sep '14) <sup>(1)</sup>						Total
	0-29	30-59	60-89	90-119	120+		
Residential	\$ 114	\$ 42	\$ 16	\$ 11	\$ 168		\$ 351
Commercial	109	23	11	7	95		245
Industrial	49	3	1	1	34		89
Other	10	3	2	5	236		257
	\$ 283	\$ 71	\$ 31	\$ 24	\$ 534		\$ 943

- The amount of 120+ days accounts receivable has grown as a proportion of accounts receivable over time



120+ AR (excl. Other) has grown from 15% of aged AR to over 40% in the past two and a half years since the CC&B (the customer service system) conversion

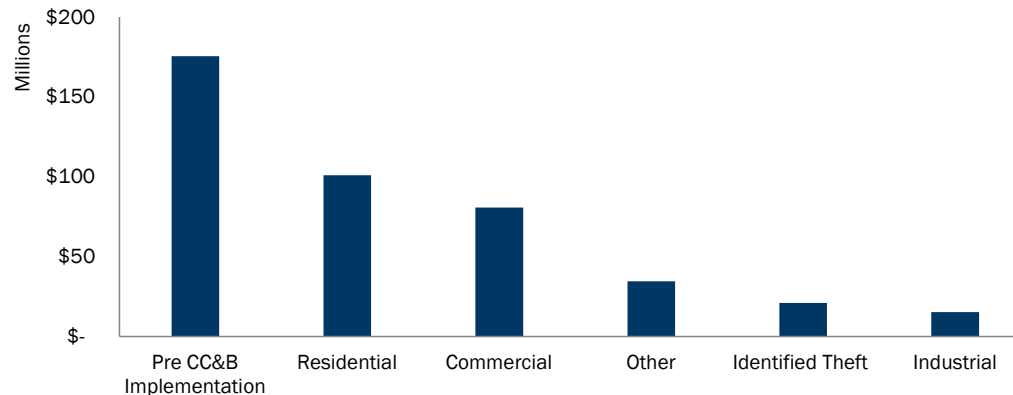
<sup>1</sup> Based on financial reporting data and will not tie to customer service data in this report. Includes customer overpayments in the other category

## General Clients – Major Drivers

### ■ Lack of collection efforts on accounts once they have been cut-off from service

- PREPA has over \$400 million of inactive accounts, and this amount increased by approximately \$100 million since June 2013

**AR by Category - Inactive Accounts (Sept-14)**



Note: Excludes customer overpayments and other miscellaneous items

### ■ PREPA does not perform credit checks on new accounts nor does it report delinquent accounts to credit bureaus since this process was stopped during the conversion to CC&B (the customer service system) in April 2012

- Had this process remained in place, approximately 145,000 accounts would have been referred to a credit agency, representing a net AR value of approximately \$122 million

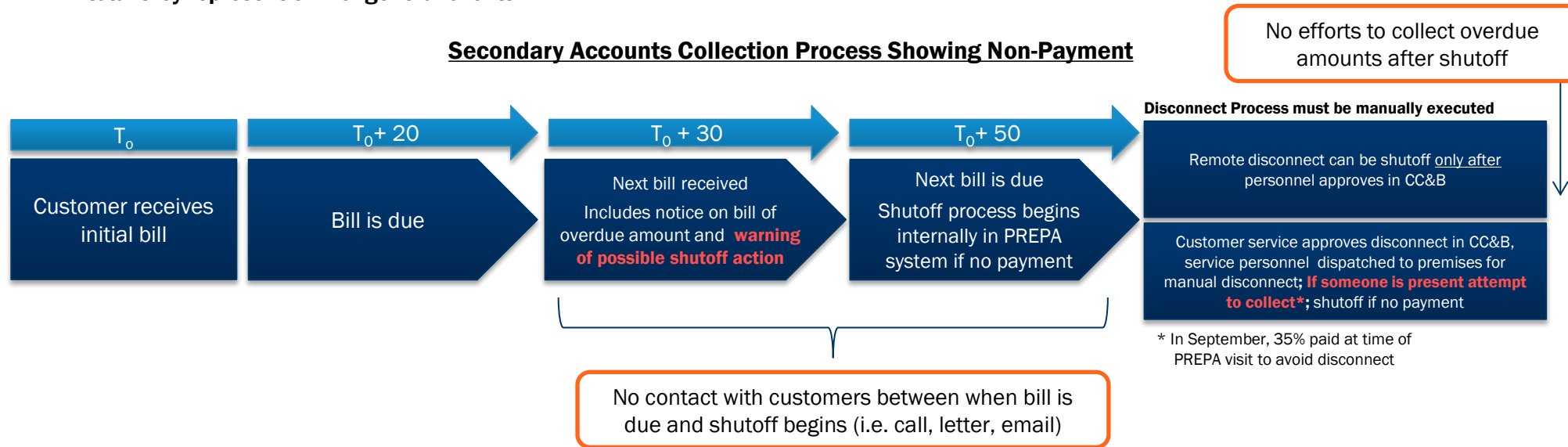
### ■ Late fees and reconnect fees are minimal, and PREPA prioritizes reconnects for customers that have been cut-off, creating disincentives for customers to pay their bills timely

- The interest rate for late payments is 8% per annum
- The reconnect fee for service that has been cut-off is \$25 (\$10 for public housing), far below the actual cost of disconnecting and reconnecting a customer
- PREPA has a policy of trying to reconnect customers on the same or day after they make a payment on their bill, incentivizing customers to wait to pay until the last minute

## General Clients – Major Drivers (continued)

- Collection efforts on secondary accounts (accounts with service less than 50 kVA) are limited, and while the individual balances are small, in total they represent 64% of general clients' AR

### Secondary Accounts Collection Process Showing Non-Payment



### ■ Compliance with severance policy varies by customer type, regional practices and resource constraints

- The customer service system (CC&B) reflects an average time to shutoff a meter (from when the initial severance condition was triggered in the system, to the actual meter shutoff) of approximately **27 days**<sup>1</sup>
- As of September 30, CC&B also reflects that there were approximately 25,000 accounts that passed the severance trigger, but had not been shutoff. This population is waiting to be dispatched. The average pending cycle time is 118 days<sup>1</sup>

### ■ Policies and procedures are not up to date with the latest systems implementation, and are not easily accessible to customer service personnel

1. Shutoff and pending shutoff data provided by PREPA based on information from the customer service CC&B database - the active system of record. PREPA reported that many field activities (including shutoffs) are physically completed yet not entered into the CC&B system, conforming to a business operational process work-around (undocumented) implemented to support prompt customer service. As this process bypasses documentation of many disconnects wherein a reconnection occurred quickly, it is expected that many shutoffs were completed in less than 27 days. Therefore, as it was determined that a majority of shutoffs are not documented, it is believed that this condition negatively skews the reported shutoff average of 27 days (per CC&B) substantially. For pending disconnections, the 118 day average may also be skewed upwards due to the fact that PREPA has faced challenges to safely shutoff meters located in certain districts. It was communicated that the practice of not assigning shutoffs (leaving them in pending state) is one driver for the inflated average of 118 days

# Top Opportunities For General Clients

**There are a number of important improvements that can be made to position PREPA to maximize its recoveries on AR over the short and medium term. The following are the most important of these recommendations**

**1**

**Engage a firm to  
Outsource Collections of  
Inactive Accounts**

- Begin RFP program with already identified collection agencies
- Scrub data on inactive accounts to identify those most likely to be collected
- Negotiate service level agreements and contract terms

**Implement  
Communication Plan  
and Overhaul of  
Customer Collection  
Practices**

- Develop communication plan to alert customers to changes in collections practices
- Implement reporting to credit bureaus for delinquent accounts
- Offer amnesty program on late fees and interest
- Increase reconnect fees and service charges
- Deprioritize customer reconnections
- Continue with automated bill reminder pilot, and expand scope of project to additional accounts

**2**

**Automate and Document  
Customer Shutoff Policy**

- Automate process between CC&B and remote cut-off meters and remove manual process that causes delays
- Standardize shutoff policies across regions to remove judgment and delays in manual shutoffs
- Review identified critical care customers to determine if criteria are still relevant and develop official policy

**3**

**Increase Data Analytics  
of Customers to Improve  
Collections**

- Review suggested criteria for customer segmentation
- Analyze customer pay patterns to create statistical models to assess customer risk and recommend action
- Redesign and leverage existing CC&B functionality for customer scorecards

**Document and Update  
all Collections Policies  
and Procedures**

- Procedures and policies need to be standardized, synchronized with CC&B, and updated on a regular basis
- Standardized reference and training documents need to be readily available to employees
- Leverage best practices across regions and service areas
- Designate a manager to lead a continuous improvement project for collections

**1 – Do NOW!**

**2 – Do in 3-6 Months**

**3 – Do Between 6-12 Months**

## Size of Opportunity

### Active Accounts

- Decreasing the length of time it takes PREPA to collect from general clients would have a significant cash flow impact.

	Days Sales Outstanding	Comments
PREPA General Clients <sup>1</sup>	60	The calculation of the general client DSO is based on the accounts receivable balance of general clients, reduced by the balance on inactive accounts and associated reserves
Comparable Utilities <sup>2</sup>	40 - 50	Given mitigating factors affecting PREPA's customer's ability to pay, a target DSO of approximately 50-55 days is reasonable as a medium term target if the recommended initiatives are implemented
PREPA Target Low	55	<b>Cash flow impact = \$51 million</b>
PREPA Target High	50	<b>Cash flow impact = \$103 million</b>

### Inactive Accounts

- The largest opportunity for inactive accounts is to leverage a collections agency
- Based upon preliminary analysis of inactive accounts, evaluating the AR by various age groups, coupled with estimated recovery rates based on discussions with agencies, provides a rough net estimated recovery value of **\$18-\$31 million**

#### Inactive Accounts (\$ in millions)

	< 90 Days	90 - 180	180-1yr	1-2yrs	>2yrs	Total
A/R Total	\$ 22	\$ 10	\$ 53	\$ 58	\$ 286	\$ 428
Recovery (Low)	7	2	8	1	-	18
Recovery (High)	11	3	11	5	-	31

### Initiatives Impacting Opportunity

- Reinstitute credit bureau reporting
- Amnesty program to encourage payments
- Deterrence actions (increased reconnection fees, service charges)
- Deprioritized reconnections for reinstated accounts
- Automated bill communications (late reminders, proactive due reminders)
- Customer segmentation analysis for improved, targeted collections
- Analysis of pay patterns and understanding non-payment drivers
- Customer communication programs and customer satisfaction efforts
- Increased rigor and compliance to policy and procedures: severance activities, collections activities and account maintenance
- Automatic meter disconnect policy and dispatch
- Quicker submittal of industrial vouchers to Treasury (law 73)
- Increased efforts on theft detection and monitoring of unbilled accounts
- Addressing chronic claims and swift adoption of law 57
- Program to monitor and improve recurring estimated meter reads
- Prioritized entry of billable field orders into the system (CC&B)
- Improved metrics and operational dashboards for regional managers
- Applied root cause and corrective action program for largest issues
- Engagement of collections agency to initiate efforts on inactive accounts
- Data cleansing of aged accounts to develop prioritized execution plan

#### Total Potential Opportunity (\$ in millions)

	Low	High
Active Accounts	\$ 51	\$ 103
Inactive Accounts	18	31
<b>Total</b>	<b>\$ 69</b>	<b>\$ 134</b>

- Although government accounts receivable are thoroughly reviewed in this report, FTI has not quantified a likely range of improvement in these balances as, due to the financial health and near-term outlook of the public corporations, the resolution of some of these balances may require solutions that may involve changes in legislation, negotiations and compromises, for which the ultimate outcome is not reasonably estimable



## Significant Non-Payment by Public Corporations

**PREPA has over \$200 million<sup>(4)</sup> in accounts receivable from public corporations, of which approximately 70% is over 120 days old**

PREPA Accounts Receivable - Public Corporations as of 9/30/14 (\$ in millions)						
0-29 Days	30-59 days	60-89 days	90-119 days	120+ days	Adjustments	Net AR
30.8	22.6	16.8	8.6	151.5	(17.7)	212.5
15%	11%	8%	4%	71%	(8%)	100%

■ The significant amount of past-due receivables is primarily attributable to two factors:

- The financial condition of many public corporations is challenging, including significant operating losses and minimal cash balances
  - The chart below summarizes the financial condition of the public corporations with the top 5 AR balances as of September 2014

(\$ in millions)	AR with PREPA (Sep '14)	Oper. Loss (FY 2013)	Unres. Cash (FY 2013)
Ports Authority <sup>(2)</sup>	\$ 41	\$ (85)	\$ 6
PRASA <sup>(3)</sup>	\$ 29	\$ (292)	\$ 102
Train System <sup>(4)</sup>	\$ 21	\$ (83)	n/a
Medical Service Administration	\$ 20	\$ (77)	\$ 4
Cardiovascular Center	\$ 17	\$ (8)	n/a

- PREPA's inability to take any enforcement action against the public corporations
  - It has been over 10 years since PREPA last cut-off power to a public corporation
  - According to PREPA's personnel, the last attempt to cut-off power to a public corporation occurred three years ago and was unsuccessful
- Some public corporations are not even making payments on current invoices, which based on recent trends, has caused PREPA to incur \$2.5 million of additional accounts receivable each month from the top public corporations<sup>(5)</sup>
- Based on discussions with PREPA personnel, a few of these public corporations have been offered payment plans to make partial payments on their current bills, but have refused to make even those payments

1. Includes \$10M for Ports Authority that is anticipated to be transferred to general clients due to a reconciliation of meters, also includes disputed amounts for the Public Housing Administration which is being reconciled  
 2. Ports Authority balance includes \$10M of accounts receivable that belong to private entities, and is anticipated to be removed from Port's balance in December  
 3. PRASA has made significant payments in October 2014 to bring its balances close to current  
 4. Recent bills have been proposed that would increase the fuel tax and include an allocation of that increase for Train, this is expected to improve the financial performance of the Train System giving them greater capacity to pay their operating expenses  
 5. \$2.5M is based on deficiency for past three months for the public corporations included in the analysis of the Top 12 governmental entities

## Significant Non-Payment by Public Corporations (continued)

- Ultimately, the non-payment by the public corporations results in a de-facto subsidy to these corporations, which has been exacerbated by the inability to take enforcement actions against non-payers
- FTI recommends the following potential strategies to maximize recoveries from public corporations
  - Utilizing the initial list of non-critical meters that has been prepared by customer service, **PREPA should commence cut-off at these locations** with past due accounts receivable to send a message to the public corporations
    - The Energy Reform Act (“Act 57”) specifically allows for the cut-off of non-critical locations as part of the government collections process
    - PREPA should also look to expand its list of non-critical locations and formalize a policy with the government regarding which locations are critical
    - Given the financial condition of the public corporations and the limited number of non-critical locations currently identified, this is likely only a partial solution
  - Engaging the Central Government to mediate payment plan discussions with public corporations that have been unwilling to engage with PREPA
  - Engaging the Central Government regarding the long-term resolution of the public corporations’ AR balances. Some options that could be considered include:
    - Write-off significantly aged public corporation balances and pass those write-offs to customers through rates
      - This would require legislation, raise public relations issues and would not resolve the ongoing inability to pay
    - Reduce rates for public corporations to match ability to pay and pass the difference to customers through rates
      - This would require legislation and raise similar public relations issues
      - Similar to current structure with PRASA, this rate can be made retroactive to reduce past-due balances as well
    - Several of the public corporations receive funding (or loans) from the Central Government to fund a portion of current operating expenses. PREPA’s current bills could be carved out from the amount provided to public corporations and the funds could be paid directly to PREPA
- It is critical that PREPA, at a minimum, **receives current payments** for public corporation usage while it works out solutions on the past-due amounts

**The ongoing non-payment by many of the public corporations has caused an accumulation of over \$200 million in AR, and an ongoing monthly deficit of approximately \$2.5 million. PREPA needs to resume cutting-off power to non-critical locations and engaging with the Central Government regarding a long-term solution**

## Payment Processing by Puerto Rico Government Agencies

### The Puerto Rico Government Agencies have significant accounts receivable in arrears

PREPA Accounts Receivable - Puerto Rico Government Agencies as of 9/30/14 (\$ in millions)						
0-29 Days	30-59 days	60-89 days	90-119 days	120+ days	Adjustments	Net AR
26.3	16.4	11.5	8.9	21.4	(8.5)	76.0
35%	22%	15%	12%	28%	(11%)	100%

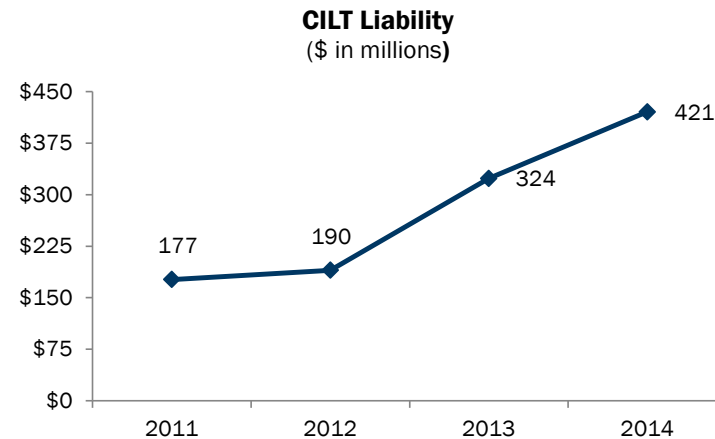
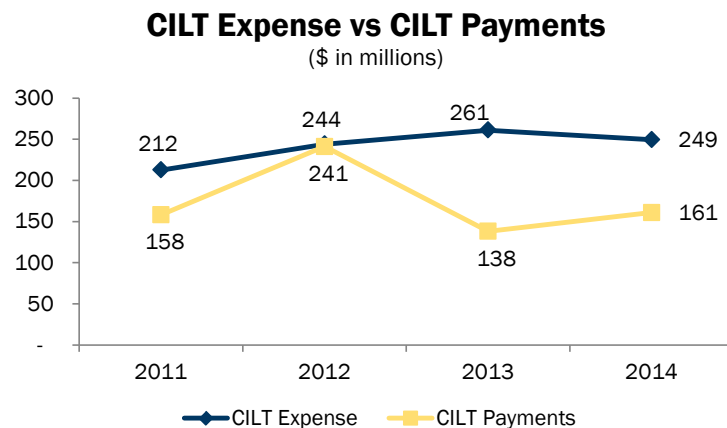
- Approximately 50% of agencies have balances over 60 days
  - In addition, approximately 50% of the accounts receivable balance from agencies is over 60 days old
    - By comparison only 25% of receivables with the federal government is over 60 days old
- There are two primary driving factors related to the aged receivables balances
  - The processing of invoices and ultimate payment by Hacienda is a process that can take over four months for several of the agencies, most notably the Department of Education, which makes up more than 50% of the total agencies' AR balances
  - Several agencies make recurring payments each month based on the amounts they budgeted for electricity charges. These amounts are paid each month regardless of the amount billed by PREPA
    - Recently this practice has resulted in a deficiency of approximately \$1 million per month
- As part of its standard processes for collections on government accounts, PREPA is supposed to meet with the Puerto Rico Office of Management and Budget to review outstanding amounts for agencies to resolve payment
  - Historically, this process has not been followed, and there has not been elevation to the senior levels of government regarding payment delays
- As a result of PREPA executives' discussions with the government regarding delinquencies in government accounts, PREPA will be engaging in discussions with the Office of Management and Budget to discuss timely payment by government agencies and how to resolve past due amounts
  - Initial meeting with the Office of Management and Budget scheduled for early November
- During the budget planning cycle, PREPA should also have the government confirm that the amounts budgeted by agencies for electricity service is consistent with the estimates provided by PREPA

**Given that the agencies' obligations are generally obligations of the Puerto Rico general fund, and thus are not credit constrained, PREPA should have a standard process to elevate these issues to the Office of Management and Budget when agencies fall behind on their payments. PREPA needs to continue current discussions with the Office of Management and Budget to resolve these balances**

## CILT Overview

### Overview of Calculation

- Although a tax-exempt entity, PREPA pays CILT as a means of compensating municipalities for forgone revenue. CILT expense, the amount PREPA owes to municipalities, is calculated based on the actual electricity usage of municipalities
- Although the amount that PREPA owes to municipalities is based on electricity usage, the amount that PREPA pays to the municipalities (the “CILT Payment”) is governed by the net revenues available to make such payments (after debt service, reserve account funding, and funding of the CIP)
  - For the past several years, the amount of funds available to make CILT Payments has been significantly below the actual usage of the municipalities
  - A liability (the “CILT Liability”) is recorded for the difference between the CILT expense that is incurred and the CILT Payments permitted to be made<sup>1</sup>



- Under the law, PREPA is allowed to offset amounts owed by municipalities for their power consumption with the CILT Payments allowed to be made in any given year
- However, given the deficiency that is described above between the consumption of the municipalities and the CILT Payments able to be made by PREPA, the full amount of accounts receivable owed by the municipalities has not been offset and, **as of June 30, 2014, PREPA had approximately \$420 million of outstanding accounts receivable from municipalities**

<sup>1</sup> The CILT liability is also impacted by payments on the credit line owed to municipalities as a result of a settlement of a lawsuit

## CILT Key Observations

### Key Observation #1 – Municipalities' Non-Payment

- The law allows municipalities and PREPA to offset amounts owed by municipalities with CILT expense, but only to the extent that CILT expense is payable in a given year
- As a result of PREPA's rate structure, expenses, and capital structure, amounts allowed for CILT Payments have been significantly lower than municipal power consumption (CILT expense), causing the CILT Liability to grow from \$177 million in FY 2011 to \$421 million in FY 2014
  - This amount cannot be offset with accounts receivable owed by municipalities and, therefore, **municipalities owe PREPA approximately \$421 million** as of FY 2014
- PREPA has historically made some efforts to collect this outstanding receivable from municipalities by sending monthly statements that denote the cumulative amount owed by the municipality and remittance information; however, further collection efforts such as shutoff of non-critical municipal locations have not been utilized

**Nothing in law permits municipalities to not make payments on the amount of receivables to PREPA that are not offset by that year's CILT Payment**

### Key Observation # 2 – CILT Structure

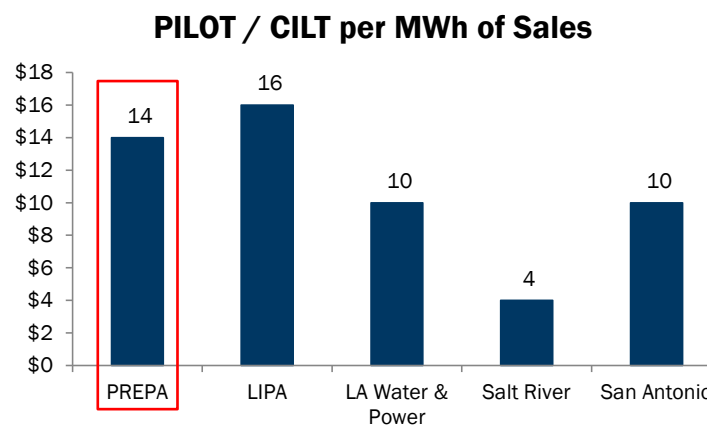
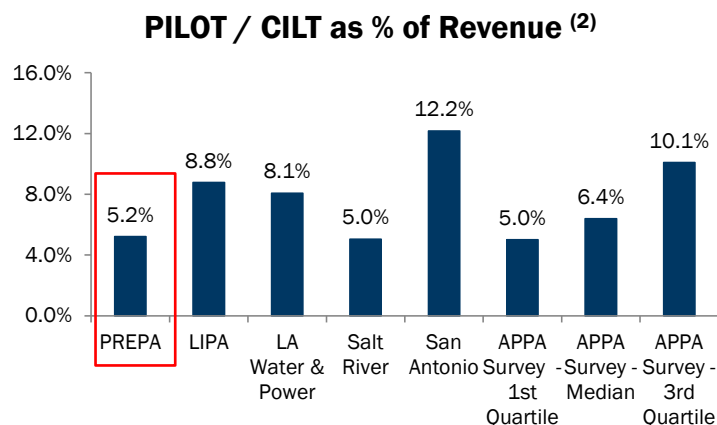
- The methodology for determining CILT (based on municipal power usage) creates poor incentives for municipalities to efficiently manage power consumption
- As a result of this structure, while PREPA's total revenue has grown at a CAGR of 4% from FY 2008-2013, CILT expense has grown at over twice that amount, 9%, over the same timeframe
  - Many municipalities have taken advantage of this to operate businesses, either directly or indirectly through municipal corporations, that earn fees/rents for the municipalities and do not pay for power
  - An opportunity exists for PREPA to audit these municipal corporations to determine if any of them utilizing municipal facilities should be considered for-profit corporations or businesses under Act 57 and **should be excluded from municipal consumption in calculating CILT**
- The structural issue is partially mitigated by recent changes in Act 57 that cap CILT expense, excluding public lighting, and require a 15% reduction in that cap over a 3-year period

**The structure of CILT incentivizes municipalities to maximize power consumption. PREPA has an opportunity to audit municipalities and municipal corporations to determine if any of their operations can be removed from the CILT calculation**

## CILT Key Observations (continued)

### Key Observation #3 – CILT Benchmarking

- FTI reviewed existing industry surveys and prepared a benchmarking analysis of CILT to Payment in Lieu of Taxes (“PILOT”) and similar programs of U.S. public power utilities
- FTI found that:
  - Over 88% of U.S. public power utilities with over 50,000 customers have PILOT or similar programs<sup>(1)</sup>
  - PREPA’s CILT expense is in line with similar programs at other U.S. public power utilities as a percentage of revenue and, while on the high side, is in the range of comparable companies as a ratio to MWh of sales



- However, comparable public power providers have rate, expense and capital structures that can support the amount of PILOT payments, whereas, PREPA’s structure can only support CILT Payments that have averaged 70% of the CILT expense

**While the total amount of CILT expense seems reasonable based on U.S public power comparables, PREPA’s recent economic performance only allows for a payment of 70% of the CILT expense**

### Key Observation #4 – Clarification of CILT Policies with the Energy Commission

- Per Act 57, the Energy Commission will serve as the governing body to interpret and approve regulations regarding the implementation of CILT
- PREPA’s interpretation of CILT and its policies with respect to accounting and collections efforts with municipalities will need to be confirmed with the Energy Commission when it is fully formed



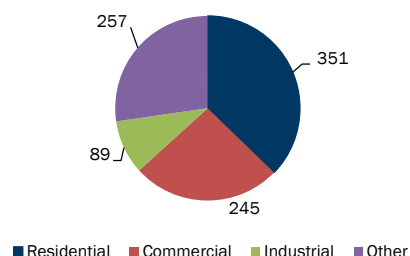
FTI Capital Advisors, LLC is a member of FINRA/SIPC.

## General Clients

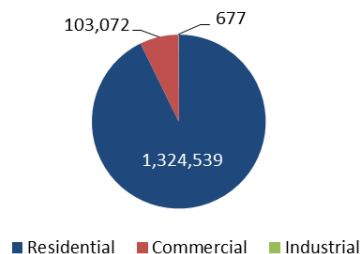
## General Clients Overview

- General clients accounts receivable consists of all non-governmental AR and is broken down into four primary categories, residential, commercial, industrial and other.
- AR balances shown include both active and inactive accounts. Active accounts have at least one active service agreement
- Other is primarily composed of bankruptcy, disputed invoices, theft, and balances from prior to the CC&B conversion in April 2012

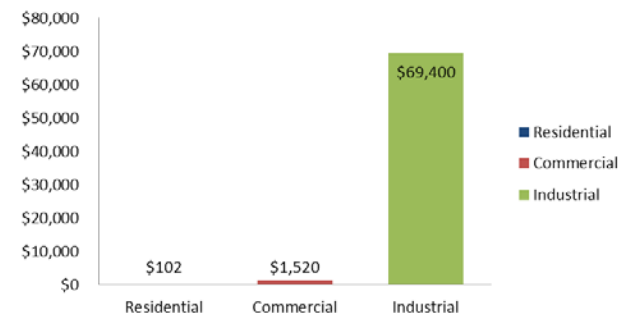
**Aged AR Balances (Sep '14)<sup>(1)</sup>**  
(\$ in millions)



**Count of Clients**



**Average Monthly Bill per Client Type**



- The aging profile of general accounts includes a significant balance of accounts that are 120+, many of which date back several years consistent with the policy to not write-off accounts until they are aged 15 years

(\$ in millions)	Aged AR Balances (Sep '14) <sup>(1)</sup>					
	0-29	30-59	60-89	90-119	120+	Total
Residential	\$ 114	\$ 42	\$ 16	\$ 11	\$ 168	\$ 351
Commercial	109	23	11	7	95	245
Industrial	49	3	1	1	34	89
Other	10	3	2	5	236	257
	\$ 283	\$ 71	\$ 31	\$ 24	\$ 534	\$ 943

1. Based on financial reporting data and will not tie to customer service data in this report. Includes customer overpayments in the other category



## Residential and Commercial Clients Overview

### Residential

- Residential reflects electricity service provided to households. There are approximately 1.3 million active customers
  - Residential customers are classified as secondary due to the type of service (all services below 50 kVA are considered secondary)
  - Residential includes standard residences and subsidized public housing. Public housing represents under 50,000 accounts, or ~4% of residential accounts
  - The average monthly customer bill (year to date) is **\$102**

#### Residential Client Statistics

September 2014 A/R Aging	\$351 million
Number of Active Service Agreements	~1.3 million
% of Active Customers that Pay on Time	73%
% Top 20 Customers represent in class	less than 1%

### Commercial

- Commercial reflects electricity service provided to business and non-profit enterprises, not engaged in industrial production. There are approximately 103,000 service agreements
  - Commercial clients are split between primary and secondary accounts based on the type of service
    - There are ~7,000 primary ( >50 kVA) service agreements
    - There are ~96,000 secondary ( <50 kVA) service agreements
  - The average monthly client bill (year to date) is **\$1,520**

#### Commercial Client Statistics

September 2014 A/R Aging	\$245 million
Number of Active Service Agreements	~100 thousand
% of Active Customers that Pay on Time	75%
% Top 20 Customers represent in class	23%

## Industrial Clients Overview

### Industrial

- Industrial includes electricity provided to businesses operating manufacturing or production based operations. Industrial clients are registered as such through the government permitting process. There are approximately 675 service agreements
  - Industrial clients are split between primary and secondary accounts based on the voltage of service
    - There are ~525 primary ( >50 kVA) service agreements
    - There are ~150 secondary ( <50 kVA) service agreements
  - The average monthly client bill (year to date) is **\$69,400**

### Industrial Client Statistics

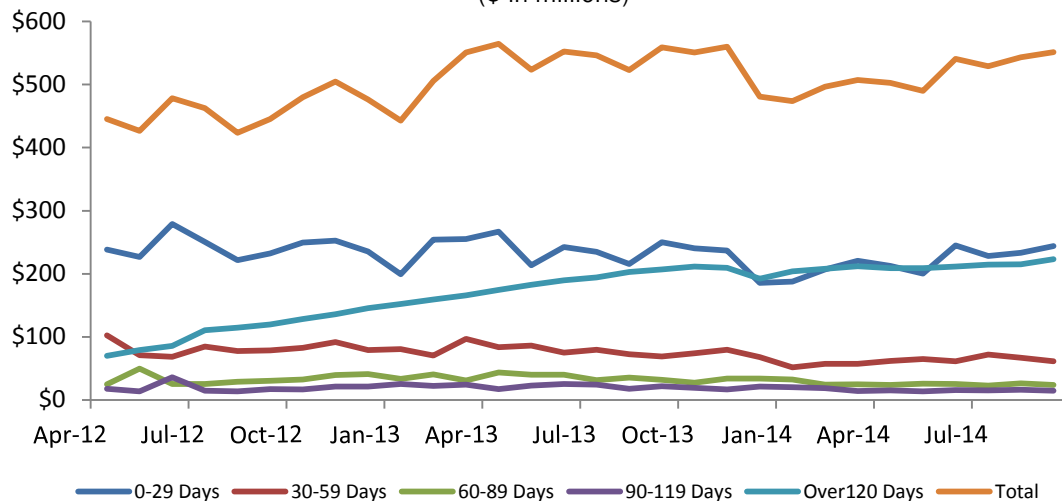
September 2014 A/R Aging	\$89 million
Number of Active Service Agreements	~ 700
% of Active Customers that Pay on Time	79%
% Top 20 Customers represent in class	57%

## General Clients – AR Trend

- The chart below shows net accounts receivable balances for the general clients by aging buckets from April 2012 to September 2014.
  - AR shown is for residential, commercial and industrial services only (CC&B conversion write off, bankruptcy, theft categories not included)
  - Balances over 120 days increased 219% from April 2012 to present, reflecting continual slippage driven by lack of write off policy and increasing reserves
  - All buckets below 120 days remain essentially flat
  - Total AR has increased 24% in this period

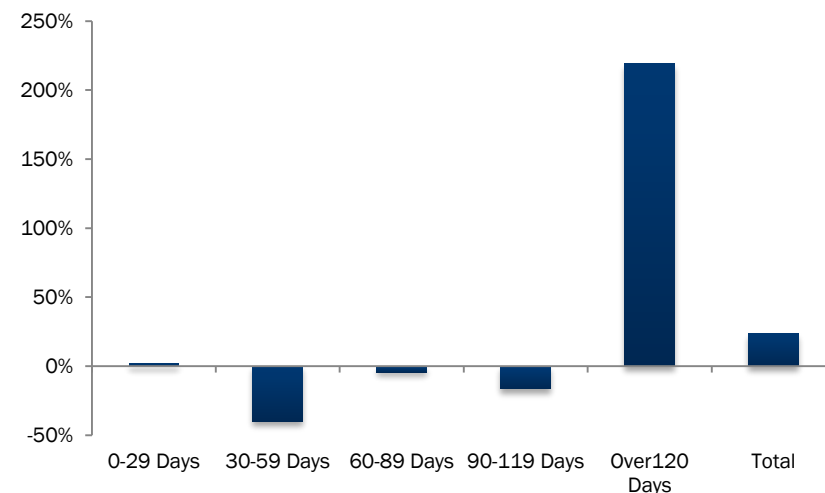
**General Client AR by aging category**

(\$ in millions)



**Percent Change by Category**

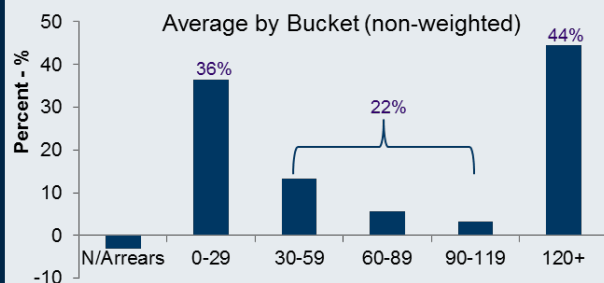
(April 2012 to present)



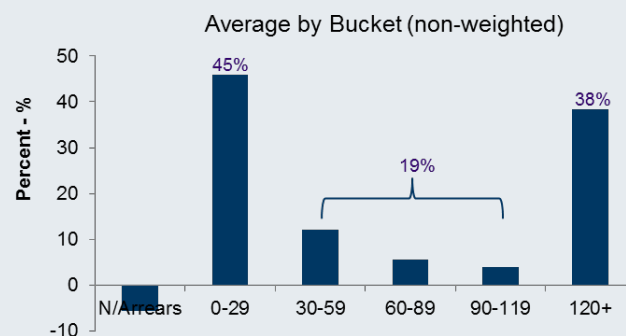
## General Clients – Payment Trends

- The three charts below show average AR by bucket by monthly average over the past year (12 months data)
  - Pay trends improve from Residential to Commercial to Industrial
  - Industrial segment pay trends are the most favorable carrying the highest percent (61%) in current month AR and the lowest in 120+ (33%).
  - Industrial also has the highest pay on time percentage at 79% (bottom chart)

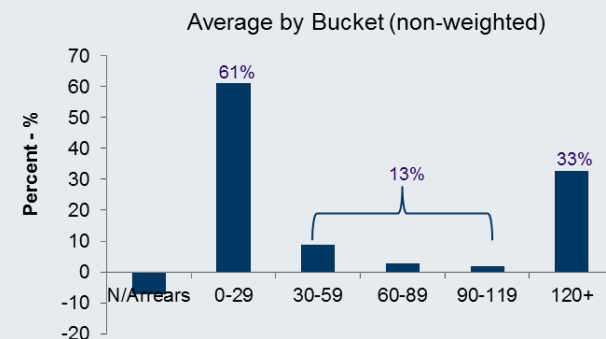
### Residential



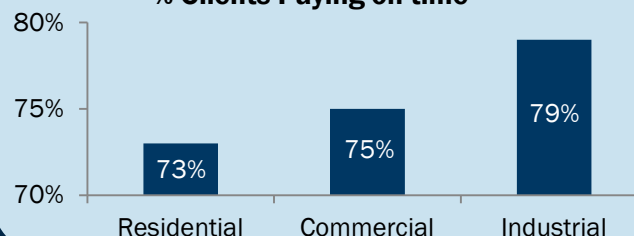
### Commercial



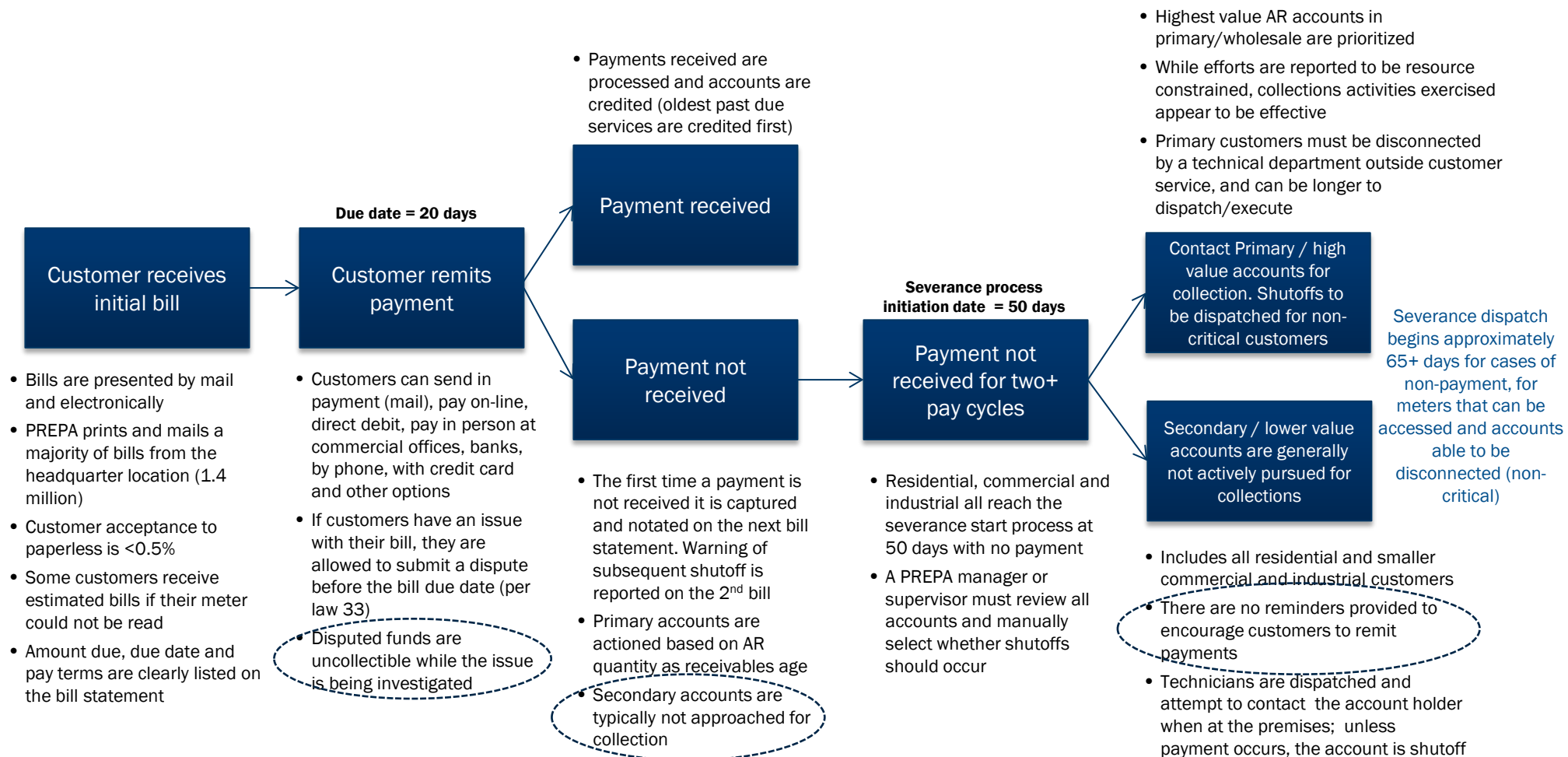
### Industrial



### % Clients Paying on time



# Billing through Collections Overview



# General Client Key Issues and Recommendations

## Key Issues

### Collections Compliance

- Over \$400 million in inactive accounts, for which there is no collection activity or strategy (includes \$175M from system conversion)
- Collection for secondary accounts consists only of a reminder on the next bill and an attempt to collect during shutoff; no additional efforts are applied
- No reporting of delinquent clients to credit bureaus
- Prioritization of primary account collection efforts is subjective, lacking analytical methods to assess risk and resource alignment
- Opportunity to develop an amnesty-based incentive program to encourage customer payment for past due accounts

### Account Management

- 3,000+ meters not linked to accounts reflect power consumption
- Compliance with shutoff policy varies by customer type, regional practices and resource allocation
- Multiple clients submit repetitive claims (AR on hold)
- Accounts with estimated readings for extended periods
- Slow system entry of account transactions for completed services, delaying billing
- Submittal of credit vouchers to Treasury for Law 73 industrial customers has taken 180 or more days; process is manual
- No credit check process before accepting new customers

## Recommendations

- Implement 3<sup>rd</sup> party collections program; start to monetize accounts
- Increase secondary collections by initiating customer communications programs for due-date and late reminders
- Reestablish reporting to credit bureaus for delinquent customers
- Develop analytical segmentation of primary customers to focus prioritized collections
- Create favorable recovery plan options to entice and encourage customers to pay a reasonable portion of past due bills in return for leniency on penalties
- Immediately launch program to evaluate and address (theft) suspect list
- Enable automatic dispatch and shutoff for accounts with remote disconnect meters
- Revise and communicate severance policies, measure and drive tighter controls around speed and effectiveness of disconnection activities
- Launch program to address chronic claims, update procedures to benefit from Act 57 (requires payment to submit claim) at earliest opportunity
- Develop program to address meters with repeated estimates; replace/relocate
- Initiate process to separate all billable paper-work to receive the highest priority for data entry; longer term: evaluate handhelds for field services with automatic communications feedback to update system data
- Deliver Law 73 vouchers more frequently (monthly minimum), or immediately for larger valued vouchers (>\$1 million)
- Institute credit checks for new accounts and adjust deposits based on risk level

# General Client Key Issues and Recommendations

## Key Issues

### **Processes & Measurement**

- Collection employees often do not utilize the most current documented procedures
- Metrics and dashboards are not fully utilized to benchmark, measure and manage operations (functional & IS opportunity)
- Minimal root cause evaluation on major issue areas and lack of best practice sharing
- No mechanism to reduce clients' tendency to delay payment until severance day

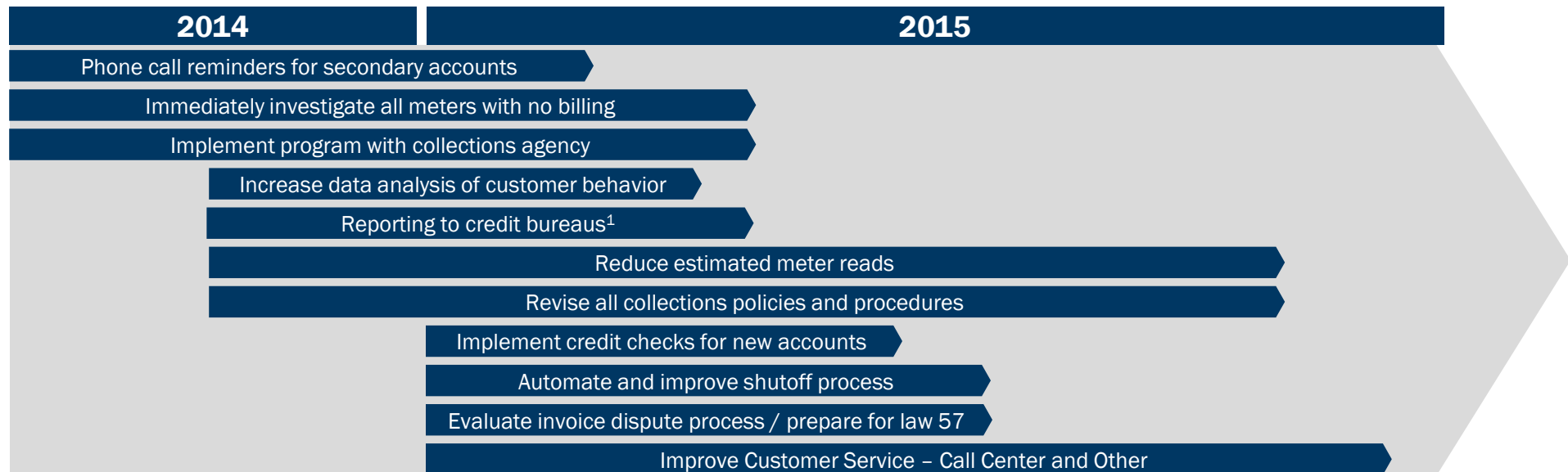
### **Customer Experience**

- Need for a focused communications campaign to update customers on key programs, initiatives and activities
- Call center performance lags behind industry standards
- No evidence of analysis to determine reasons for non-payment by clients, to allow development of strategies to address
- No clearly defined customer satisfaction programs or metrics to rate client satisfaction level. No process to gather customer feedback on a systematic basis

## Recommendations

- Update and refresh all procedures, communicate and retrain personnel; implement audit plan to ensure compliance; consider dedicated quality manager
- Develop operational dashboards which can be reported more frequently than monthly. Region managers need tailored dashboards with clear targets, actions and accountability; leverage data-rich CC&B / business intelligence
- Select a standard to benchmark against and leverage to develop reasonable targets and drive improvement plans to achieve these goals
- Re-baseline existing metrics and add targets. PREPA should introduce important metrics which are not currently being reported
- Implement a root-cause and corrective-action process within customer service to address systemic issues and prevent reoccurrence (quality management)
- Re-evaluate deterrence initiatives; increase reconnection fees, increase late payment interest charges, increase security deposits, deprioritize reconnects
- Develop and launch a targeted customer communications program specifically aimed at making customers aware of significant policy changes and initiatives that may affect their accounts
- Re-engineer the call center; evaluate benefits of outsourcing
- Capture direct customer feedback for reasons of non-payment; analyze, address
- Launch customer satisfaction program, including a measurement process, surveying, benchmarking to develop initiatives to drive improvements. PREPA leadership engagement required to ensure this is a top business priority

## Timeline of Implementation for General Clients



Initiative	Start	End	Timing Rationale
Phone call reminders for secondary accounts	Nov 2014	Jan 2015	Pilot in Nov. Monitor/evaluate results for Jan. go-live
Immediately investigate all meters with no billing	Nov 2014	Mar 2015	PREPA now has the data, effort very manual, resource limit
Implement program with collections agency	Nov 2014	Mar 2015	RFI/RFP efforts sooner, analysis and launch '15
Increase data analysis of customer behavior	Dec 2014	Feb 2015	Evaluate and start near term, iterative analysis
Reporting to credit bureaus	Dec 2014	Mar 2015	In PREPA review, launch after customer communications
Reduce estimated meter reads	Dec 2014	Aug 2015	Can start quickly, efforts to address will be service intensive
Revise all collections policies and procedures	Dec 2014	Aug 2015	Immediate start, process can be review, approval intensive
Implement credit checks for new accounts	Jan 2015	May 2015	Process to initiate can be quick, system/data capture longer
Automate and improve shutoff process	Jan 2015	Jun 2015	Internal analysis and system program may be required
Evaluate invoice dispute process / prepare for law 57	Jan 2015	Jun 2015	Initial actions can begin, law 57 will require system changes
Improve customer service – call center and other	Jan 2015	Sep 2015	Efforts should start, build momentum, then continue to grow



# Summary of Recommendations

## Key Recommendations by Issue

### Collections Compliance

1. Call reminders
2. Collection agency
3. Credit bureau reporting
4. Analytical behavior modeling
5. Amnesty programs

### Account Management

6. Analyze non-billed consuming meters
7. Auto dispatch of shutoffs
8. Chronic Claims
9. Estimated meters
10. Field work entry into system
11. Law 73 vouchers
12. Credit checks

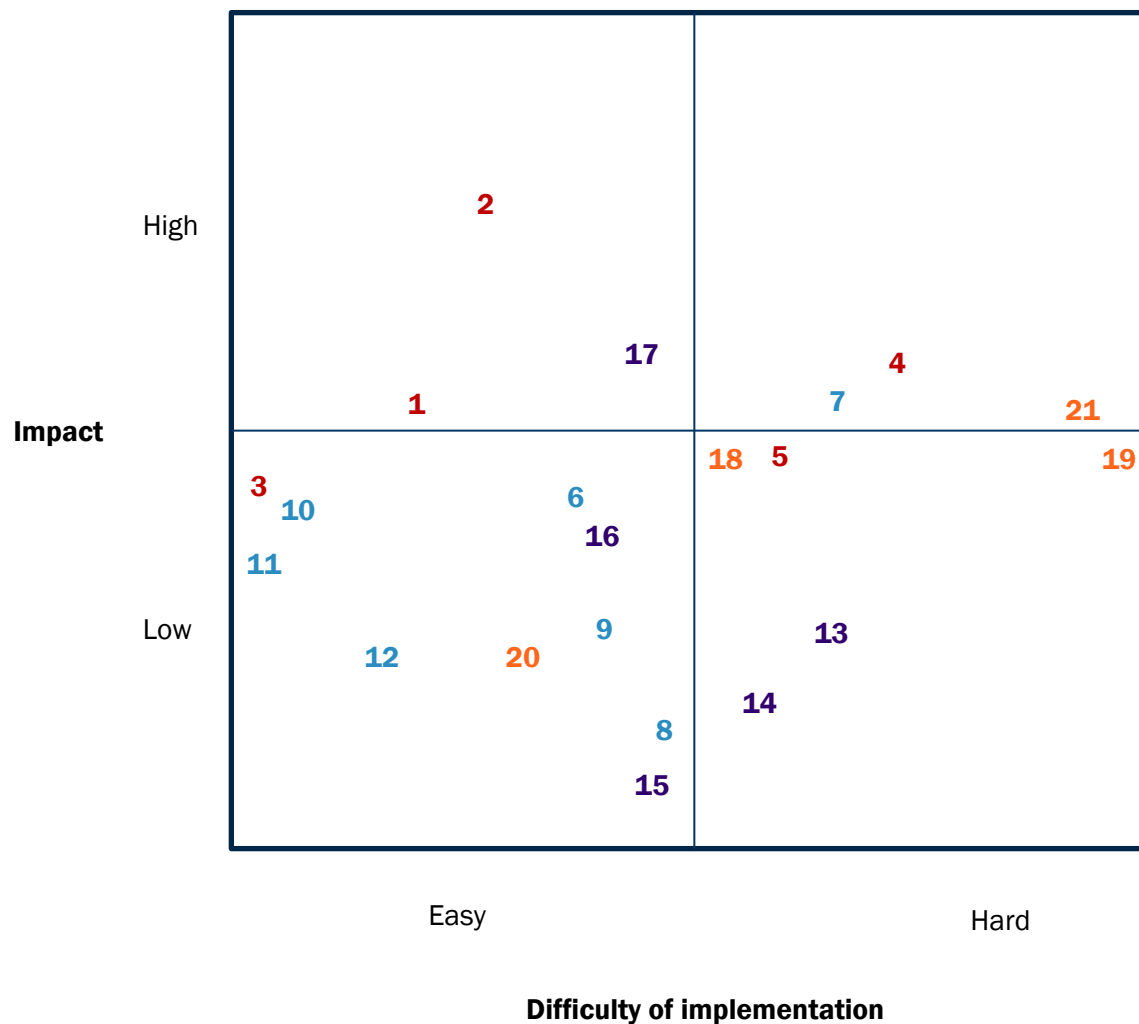
### Process and Measurement

13. Revise procedures
14. Dashboards and metrics
15. Benchmarking
16. Root cause analysis program
17. Deterrence initiatives

### Customer Experience

18. Communications Campaign
19. Reengineer call center
20. Understand reasons for non-payment
21. Customer satisfaction program

## Recommended Process Improvements





FTI Capital Advisors, LLC is a member of FINRA/SIPC.

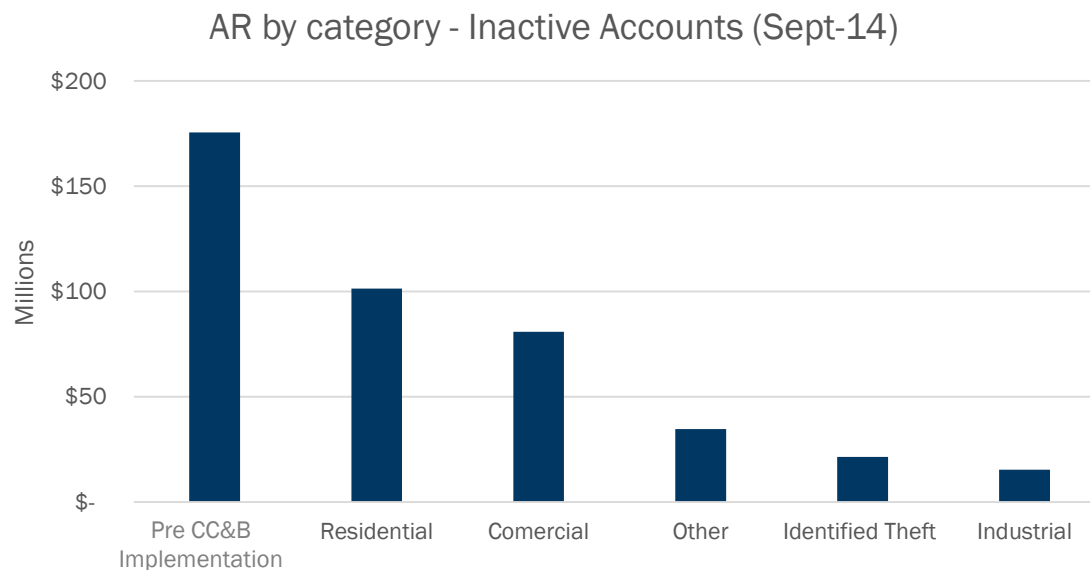
## General Clients – Detailed Recommendations

# Collections Compliance – Inactive Accounts<sup>1</sup>

Key Issue Area – Overview	Over \$400 million in aged inactive accounts with no collection activity or strategy to address
<b>Observations / Findings</b>	<ul style="list-style-type: none"> <li>• There are a large amount of inactive accounts reflected by \$400+ million of past due AR (excludes over payment credits)</li> <li>• Customer service does not attempt to recover from clients/accounts after they are shutoff <ul style="list-style-type: none"> <li>• PREPA has indicated that it believes that there is low chance of recovery on inactive accounts and, thus, collection efforts are focused to active client accounts</li> </ul> </li> <li>• ~\$175 million of the Inactive Accounts stem from the transition to the CC&amp;B system in April 2012. These are unlikely to be collectible</li> <li>• Debt on closed accounts is offset by the security deposit. If the client has another active open account, the remaining debt is transferred to this account. Aside from the offset and transfer, all remaining balances will be classified as inactive accounts</li> <li>• Outside parties or collection agencies are not utilized</li> </ul>
<b>Recommendations</b>	<p>Implement a 3<sup>rd</sup> party collections program to begin monetizing inactive account balances</p> <ul style="list-style-type: none"> <li>• PREPA should develop and distribute to potential Puerto Rico collection agency candidates (potential candidates include Transworld Systems, NCO Financial) a Request for Information or Request for Proposal (RFI / RFP) per its standard bidding process</li> <li>• Evaluate responses from bidders such as: rates (flat rates, %, %-by age, by type of account), estimated recovery levels expected, timeframe, approach and methodology (email, letter, calls, visits), service level agreements, level of PREPA involvement required</li> <li>• PREPA should scrub and prepare an initial cleanup of all inactive account data in preparation of the program launch to facilitate an effective collections effort</li> <li>• Negotiate service level agreements (SLA's) and contract terms and commence engagement with preferred collections agency</li> </ul>
<b>Benefits</b>	<p>Based on preliminary analysis, which will need to be refined as PREPA engages a collection agency, recovery opportunity may be in the range of \$18 million - \$31 million</p> <p>Shared recovery model requires no expenditures to pursue such an arrangement</p>

1. Inactive accounts – accounts that have been disconnected and do not have an active service agreement. As of September 2014 there are 631,261 Inactive Service Agreements for an AR dollar value of \$428,816,218

## Collections Compliance – Inactive Accounts

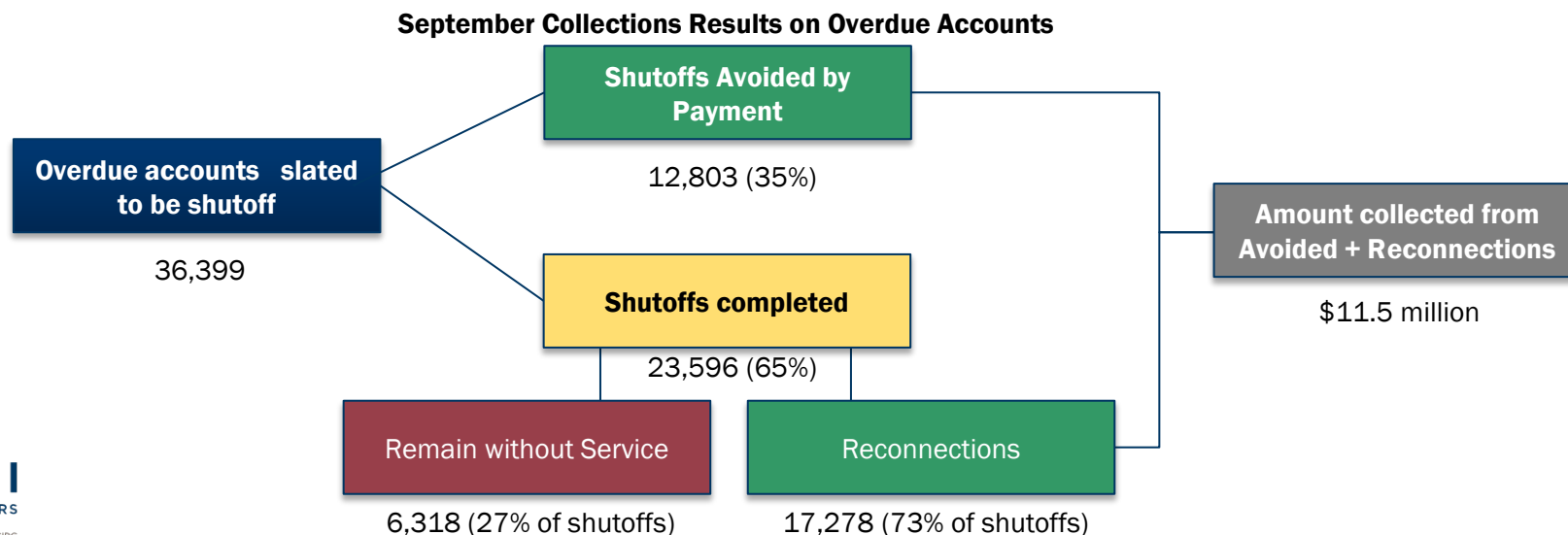


- Preliminary analysis of inactive accounts was performed using the accounts receivable aging and applying estimated recovery rates dependent on the length of time the account was inactive
- Recovery rates were provided as a preliminary estimate only, based on initial high level discussions with a collections agency with some experience in Puerto Rico
- Preliminary estimates suggest a **\$18-31 million net recovery** may be possible, however, this estimate is subject to further refinement

<u>Aging Inactive Accounts</u> (in millions)	< 90 Days	90 days – 6 months	6 months – 1 Year	1 Year – 2 Years	> 2 Years	Totals
<b>Inactive Accounts</b>	\$22	\$10	\$53	\$58	\$286	\$428
<b>Recovery Percentage</b>	50% - 75%	30% - 50%	25% - 35%	5% - 15%	0%	Various
<b>Recovery Amount</b>	\$10 - \$16	\$3 - \$5	\$13 - \$18	\$2 - \$8	\$0	\$28 - \$47
<b>Cost of Recovery (Assumption)</b>	\$3 - \$5	\$1 - \$2	\$5 - \$7	\$1 - \$3	\$0	\$10 - \$16
<b>Net Recovery</b>	\$7 - \$11	\$2 - \$3	\$8 - \$11	\$1 - \$5	\$0	<b>\$18 - \$31</b>

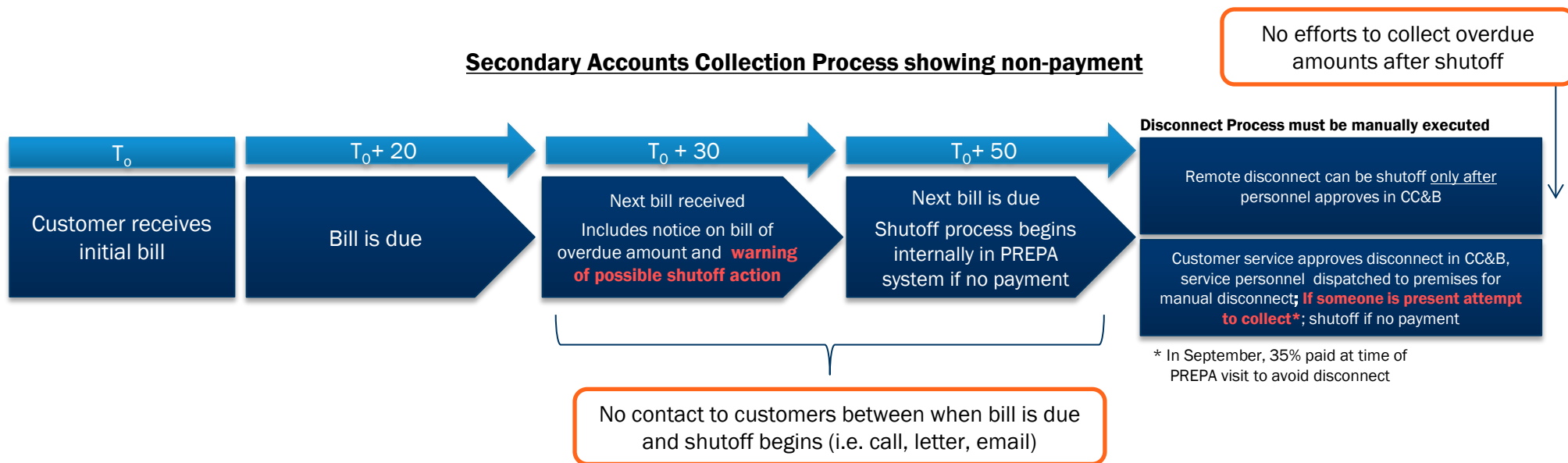
## Collections Compliance – Collections on Secondary Accounts

Key Issue Area – Overview	Collection efforts on secondary accounts is limited and while these accounts are generally smaller in consumption, there is a large amount of AR that is left unaddressed
<b>Observations / Findings</b>	<ul style="list-style-type: none"> <li>There is little proactive effort to collect on the secondary accounts. No special email, letter or phone call attempts are made to escalate the situation with these clients.</li> <li>Collection for secondary accounts consists only of a reminder on the next bill and an attempt to collect during shutoff. This contributes to clients delaying payment until the last possible moment. In September, for example, PREPA collected \$11.5 million from 30,000 of 36,000 accounts slated to be shutoff (payment to avoid shutoff or payments with reconnection). In addition, the lack of focused collection efforts likely contributes to many accounts becoming inactive and uncollectible</li> <li>PREPA will pilot with a vendor on a no-cost trial basis, an IVR (interactive voice mail) program to start transmitting account payment reminders for past due accounts (target start November 2014)</li> </ul>
<b>Recommendations</b>	<ul style="list-style-type: none"> <li>Launch pilot program per November schedule and start sending reminders (phone/messaging) to customers immediately. PREPA needs to have a process in place to monitor and quantify the results and effectiveness of the pilot</li> <li>Appoint Program Manager to lead secondary account efforts; to ignite and drive initiatives to collect current and past due AR</li> <li>Communicate broadly and educate the customer service team regarding this newly launched communications effort</li> <li>Analyze the results from the pilot; evaluate and determine the best methodology to continue after pilot completion</li> <li>Consider the use of additional collection/shutoff warning notification methodologies (letters, inserts with bills, etc.) to further drive more timely collections</li> </ul>
<b>Benefits</b>	Working capital improvement as a result of earlier collections and lower bad debt due to fewer accounts becoming inactive



## Collections Compliance – Collections on Secondary Accounts

- Secondary accounts include 100% residential and approximately 90% commercial and 20% industrial clients. This segment accounts for \$376 million of AR
- Collections activity for general clients is passive in nature. As PREPA focuses on larger wholesale accounts, secondary accounts are seldom targeted
- Customers have various mechanisms to submit their payments: mail, internet, electronically, banks, payment centers and PREPA's commercial offices
- The customer service system (CC&B) includes collections functionality, but it does not actively communicate actions or reminders for secondary clients
- A process overview is shown below for secondary collections. Just two actions (maximum) occur to encourage payment:
  - A warning is listed on the 2<sup>nd</sup> bill (first new bill after missing payment) and subsequent bills
  - For manual disconnect meters, check if client is at premises and allow opportunity to pay (remote disconnects do not get this option)



# Collections Compliance – Collections on Secondary Accounts

## Benefits of Proactive Customer Reminders

- Benchmark example – Success story leveraging customer reminders

### Success Story: North American Provider Increases Collections by Millions of Dollars\*

#### SOLUTION:

A North American utility company initiated an automatic collections solution. In the first year, the system enabled the utility to achieve impressive results.

#### RESULTS:

- Over 17,000 late payments totaling almost \$19 million have been collected through automated calls
- Over 12,000 customers who received personalized answering machine messages responded and self-served through the IVR system for collections of almost \$15 million
- Automated outbound collections calls delivered additional savings through reduced mailing costs and live agent call deflection

\*Source: Nuance Communications white paper

- Benefits of Proactive Notifications\*\*

- Almost three quarters (75%) of respondents have experienced a proactive email communication in the past six months
- Respondents have received more automated customer care calls than live customer care calls
- Over a third (33%) of respondents are receiving proactive messaging by SMS or text message
- Providing event-triggered information can boost customer satisfaction
- Outbound campaigns can be tailored to customer preferred times and media types as the experience-database is developed

\*\*Source: Harris Interactive Consumer Research

## Collections Compliance – Reporting to Credit Bureaus

Key Issue Area – Overview	No reporting of delinquent clients to credit bureaus
<b>Observations / Findings</b>	<ul style="list-style-type: none"> <li>• Prior to PREPA's conversion to the CC&amp;B customer service system in April 2012, clients with past due receivables would be referred to the credit bureau (UCB) upon closure of their accounts by PREPA</li> <li>• In early 2012 the credit reporting process was terminated and has not been resumed. No specific reason for this was confirmed; however, the PREPA executive team mentioned the possibility that the previous government administration may have played a part in the decision</li> <li>• Regardless of the past position, PREPA sees this as an opportunity that should be reconsidered</li> <li>• PREPA is currently performing internal review and signoff to reinstate this policy and procedure</li> <li>• Feedback from several personnel within PREPA reflected their opinion that the general public is aware that no information is currently being sent to the credit bureau, easing clients' concern for non-payment</li> <li>• Had this process remained in place, approximately 145,000 accounts would have been referred to the credit agency, representing a net AR value of approximately \$122 million (includes only accounts with a balances greater than \$100)</li> <li>• Preliminary analysis of the situation has not uncovered any legal limitations for PREPA to restart credit referrals based on current legislation</li> </ul>
<b>Recommendations</b>	<ul style="list-style-type: none"> <li>• Complete internal review and reestablish reporting to the credit bureau (UCB) as quickly as possible</li> <li>• Evaluate the benefit of conforming to industry standards when reporting to credit agencies (i.e., report when accounts become past due by more than a specific number of days, as opposed to when the account becomes inactive)</li> <li>• PREPA should communicate this process internally, to familiarize employees, and also clearly advise customers that they will be reported when their accounts become past due</li> </ul>
<b>Benefits</b>	<ul style="list-style-type: none"> <li>• Communicating PREPA's credit reporting policies to clients and acting upon them will serve as a deterrent to slow or non-payment</li> <li>• Though difficult to directly quantify, improvements in timeliness of payments and reduced AR should result from this process</li> </ul>



# Collections Compliance – Prioritization of Primary Account Collections

Key Issue Area – Overview	Lack of analytical and/or risk based modeling process to prioritize primary account collections effort
<b>Observations / Findings</b>	<ul style="list-style-type: none"> <li>• PREPA reports that its ability to drive collections is resource limited. As a result, PREPA typically focuses most of its efforts on larger primary/wholesale accounts</li> <li>• Generally, the efforts FTI observed as customer service personnel pursued collections was favorable; such actions culminated with funds being received and/or a payment plan being established</li> <li>• To date, PREPA account segmentation has been comprised of residential, commercial, industrial and government (covered separately)</li> <li>• Accounts with the highest valued AR are usually the top focus, yet it was not shown that any other analytical or statistical risk based modeling was employed</li> <li>• The customer service tool (CC&amp;B) has the functionality to record additional data, and potentially can be modified to provide for improved prioritization</li> <li>• Best practices for utility based collections include progressive prioritization strategies to yield more effective, efficient collections</li> <li>• Several utilities have adopted innovative segmenting of their customer base to help identify statistical patterns               <ul style="list-style-type: none"> <li>• Analytical data captured coupled with client-specific behavioral characteristics can provide insight to collections risk</li> <li>• Activities such as customer payment processing, pay habits, ability to pay, cash flow management can provide insightful data</li> <li>• Patterns can be observed and probability and predictive capabilities can be introduced to drive objective decisions</li> </ul> </li> <li>• Understanding pay patterns, probability-to-pay or risk-for-lateness can provide insight to improved, tailored collections</li> </ul>
<b>Recommendations</b>	<ul style="list-style-type: none"> <li>• PREPA should perform analysis to re-segment their customer base. Some existing data can already be made available from CC&amp;B for analysis, and any additional data fields could be configured for capture in the system moving forward</li> <li>• Examples of attributes for PREPA to evaluate include:               <ul style="list-style-type: none"> <li>• promises kept, trends of carrying past dues, causes of delinquency, ability to pay, time of month paid;</li> <li>• media acceptance (mail, phone, email or text), ability to influence (based on past efforts); and,</li> <li>• other differentiating characteristics observed in the client base (see two general examples outlined on the next page)</li> </ul> </li> <li>• Customer pay patterns should be analyzed to help create statistical models that can arithmetically derive net risk levels vis-à-vis other collections candidates and lead to recommended priority</li> <li>• After analytical segmentation analysis is complete, PREPA should compare how ranking would compare to its more traditional approach to target customers. This should be done for several periods, especially as the data and trends are being acquired to better develop the model. CC&amp;B could be leveraged/modified to capture necessary data and to maintain modeling information</li> </ul>
<b>Benefits</b>	<ul style="list-style-type: none"> <li>• Benefits of analytical and risk based AR collection models have shown increased net collections and efficiencies</li> <li>• Statistical modeling utilizing customer behavioral data will provide more objective recommendations for prioritization</li> <li>• In addition to highlighting priorities as to where to focus, the process can provide recommendations to deprioritize accounts (cases of customers predicted to self-heal, or where the engagement of collections agency earlier is warranted).</li> </ul>

# Collections Compliance – Prioritization of Primary Account Collections

## Collections Behavioral Scoring – Example Approach #1

- Initiate risk management controls during account creation
  - Make risk assessments – perform credit check, set risk based security deposit level, confirm no prior past-due accounts, track in system
  - Gather key customer account data accurately; maintain through lifecycle
- Start to capture customer behavior attributes (store in database)
  - Payment methods, pay submittal variance to due date (+/-), %-on time, partial payment, bounced check or rejected credit card occurrences
  - Preferred communication channels, “best-time-to-contact”
  - Promises kept/broken, #-disputes filed
  - Ability to influence and does the customer respond more favorably to certain types of collections efforts
  - Capture special circumstances (job loss, illness, business conditions); may merit one-time special considerations
- Develop behavioral scoring model
  - Based upon individual customer interactions and behavior with the utility
  - Calculate score for each customer tracked (dynamic or static updates)
  - Develop future payment behavior with statistical algorithm by linking correlations from behavioral data to likelihood of paying
- Create spectrum of customer categories
  - Ex: Pay – never, bad, slow, self-healing, good, excellent
- Develop response policy and procedures based upon customer types
  - Ex: Good+ customers should not see disconnect upon 1<sup>st</sup> offense if have strong history for x period, unless their behavior changes, within pre-assigned thresholds
  - Ex: Bad- customers should see security deposit increase for missed pay
  - Prioritization for shutoff
- Decisions and actions based on customer behavioral score and probabilities derived from the developed model
- Predict collections risk and action; eliminates human judgment/error

(Reference source – Interactive Intelligence )

## Collections Process Marginal Value to Call – Example Approach #2



- Segment opportunities: credit scores, payment history, AR amounts, AR age groups, reasons for non-payment, ability to influence.
  - Develop marginal outcomes for multiple cause/effect evaluation events
- Customer modeling: ex: goal is to determine expected marginal response of a delinquent customer to calling attempts (should a call be made or not?)

Example of probability modeling:

Model	Result	Technique
P(contact, no contact, left message)	The likelihood that an attempt to call will turn into a contact by time of day, day of week, given a customer's contact history	Data analysis, predictive model
P(promise given contact)	The probability that a contact will result in a promise	Data analysis, predictive model
P(payment given promise)	The likelihood that a promise will result in a payment received	Data analysis, predictive model
P(payment given no contact)	The likelihood that a payment will come in without a contact given time since cycle	Data analysis, predictive model, simulation model
Distribution of customer shift to a better/worse condition given a payment	The expected next cycle risk segment of a delinquent customer given a payment received	Data analysis, statistical model
Distribution of customer shift to a better/worse condition given no payment	The expected next cycle risk segment of a delinquent customer given no payment received	Data analysis, statistical model

- From the data captured, the statistical model can allow you to:
  - From: Contact history, probability ... Know: Results due to n contact attempts
  - From: Number contacts expected ... Know: Number promises expected
  - From: Number of promises expected ... Know: Number payments expected
  - Continue to lead to marginal payment, amount, date.
  - Convert to risk scores ... can convert to collections risk or expense
  - Leads to a statistically formulated “reasonable” expectation
- Outliers and abnormal conditions may cause analysis blips, but these would otherwise have occurred likewise without a statistical model
- Determines recommended actions for who to call, quantity of calls, marginal impact of additional efforts. Similar analysis applies for other input events

## Collections Compliance – Amnesty Program

Key Issue Area – Overview	Many past due accounts have low probability of recovering funds; an amnesty program may entice customers to pay
Observations / Findings	<ul style="list-style-type: none"> <li>• There are currently no concession based programs at PREPA to encourage non-paying customers to remit past due payments</li> <li>• While an amnesty program would include concessions, the opportunity to gain some level of recovery could be favorable</li> <li>• Most of the candidate accounts (late, active secondary and inactive shutoff accounts) are not currently pursued by PREPA</li> <li>• PREPA offers payment plans for active clients under certain conditions and requirements, but no special payment plans for inactive accounts were identified</li> <li>• US utilities have offered similar amnesty and observed modest results (example – PECO)</li> </ul>
Recommendations	<ul style="list-style-type: none"> <li>• PREPA needs to evaluate the potential value of implementing an amnesty program</li> <li>• Legal or regulatory restrictions should be evaluated for possible limitations, yet no restrictions have been identified to date</li> <li>• An amnesty program could be initiated for a limited period to encourage customers to pay past-due bills (1 to 3 months) <ul style="list-style-type: none"> <li>• Advertise as one-time program to customers offering amnesty</li> <li>• Needs to be very well communicated; news, newspapers, billboards, social media</li> <li>• Leniency being offered, in preparation for a newly introduced much stricter compliance policy for payments, shutoffs, credit bureau reporting, theft detection and prosecution, increased overall consequences for non-payment</li> </ul> </li> <li>• Program needs to be “attractive”, <b>‘Here is what you can get’</b> <ul style="list-style-type: none"> <li>• Concessions on past due debt (up to 25%) for an incremental increase on security deposit</li> <li>• Late fees, interest, other charges could be forgiven. No submittal to credit bureau</li> <li>• Provide tailored education series to address specific customer situation for: savings ideas, energy conservation, payment help</li> <li>• However, consistent with payment plan conditions, defaulting will trigger consequences</li> <li>• New payment plan offerings should be considered (standard 3 month, 1 year or 3 year alternatives are not very progressive); <b>make it easy for the customer to pay. PREPA should have more options available to address both able-to-pay and low-income customers</b></li> </ul> </li> <li>• PREPA could also evaluate initiation of a program to provide amnesty for theft. Self-report, and PREPA will collaboratively work out a payment plan (possibly no interest fees or other penalties). One time only, and PREPA will not prosecute</li> <li>• Program should have a big kickoff and a clear end date. Encourage customers to join now, or miss the boat. Concurrent with other recommendations in this report, additional associated benefits or consequences for future should be stated clearly</li> </ul>
Benefits	<ul style="list-style-type: none"> <li>• Limited recovery is a better alternative than not collecting</li> <li>• Progressive and innovative programs garner customer support when they feel the business is trying to engage and be supportive</li> <li>• Estimated recovery cannot be provided until a program is scoped with offerings and considering tradeoffs; however versus doing nothing, the impact is likely to be positive</li> </ul>

US utilities have offered similar amnesty programs

PECO Declares Friday, April 1, Amnesty Day, for Delinquent Customers; Urges Customers Who Haven't Paid Their Bill to Call

## Account Management – Meters with no Billing

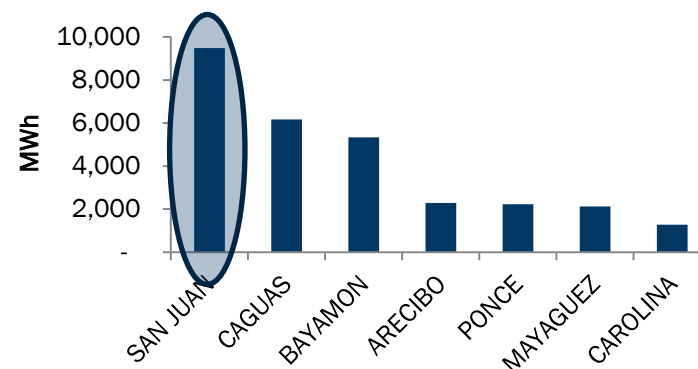
Key Issue Area – Overview	Meters with no account/service agreement are registering consumption and no billing is occurring.
<b>Observations / Findings</b>	<ul style="list-style-type: none"> <li>• An analysis of August &amp; September data reflected that 3000+ meters did not appear to be linked to an account yet meter readings reflected that consumption was possibly occurring</li> <li>• This population is based on a query of the customer service database</li> <li>• This information was not previously available from any standard report, and was uncovered as a result of FTI's investigation in connection with this report with support from the information services team at PREPA</li> <li>• Details of meters, district locations and consumption have been provided to Customer Service and ICEE (Theft Department)</li> <li>• While it is possible that some of these meters may have an acceptable reason for this condition, or that there may be some anomalies based on the query, it is suspected that a subset of this population may be theft related</li> <li>• Data by region and district has been analyzed to show where the higher concentrations are located (see next page). The customer service took quick action to assign each region to begin review and investigations based on this data</li> <li>• Based on the initial sample reviews by region, it was uncovered that a large portion of this group appears to be explainable. Some of the meters were found to have had a false (null) reading in the prior month falsely reflected consumption. A portion of meters had an active service agreement, yet the accounts appear to have been maintained incorrectly in the CC&amp;B system and falsely reflected no association to a client. The remaining meters (~2300) should still be considered a risk until they are evaluated</li> </ul>
<b>Recommendations</b>	<ul style="list-style-type: none"> <li>• Continue investigating this population of meters. All region leaders should be aware and engaged to support this activity. FTI has provided the data to the customer service and theft departments</li> <li>• Customer Service and ICEE (Theft) need to fully collaborate to drive this investigation quickly</li> <li>• Prioritization should be based on highest consumption meters</li> <li>• Findings should be captured and compiled, and fully shared with all involved in the investigation (false positive cases, confirmed issues, all pertinent results)</li> <li>• Evaluate and address all systemic issues uncovered</li> <li>• A new process to manage this risk area, including systematic tracking, addressing new cases, documenting the investigation process, and a list of process owners and specific actions, with the goal to minimize future occurrences should be designed and implemented. Reporting should be on a weekly basis, at least until all major lessons learned are understood and addressed, and the process is stable and under control</li> </ul>
<b>Benefits &amp; Timing</b>	<p>At a nominal electrical rate (\$0.25/kW-hr) PREPA could be losing up to millions of dollars of revenue per month based on the initial period sampled. Historical accumulated unbilled exposure could be greater.</p> <ul style="list-style-type: none"> <li>• Working capital is negatively impacted by these occurrences and PREPA is taking losses with respect to these meters</li> <li>• Amounts not billed timely become much more difficult to collect</li> </ul> <p>PREPA needs to drive this investigation to closure immediately and rapidly document and implement the new procedures</p>

## Account Management – Meters with No Billing

### Data analysis by region and district

- The population of 3000+ meters was reviewed to check for obvious patterns.
- September consumption was up 67% versus August
- Review is currently in process to look back to January 2014 to gather and evaluate year-to-date meter data
- San Juan, Bayamon, Caguas each represent about 20% of the meter count, but no one region stood out based on occurrences
- From a consumption basis, San Juan represents 33% of the total and should be a priority to review
- FTI reviewed the top 5 district list by count and consumption and found that Hato Rey (1 of ~35 districts) represents 30% of the entire population for consumption (about \$2.2 million)
- Suggested priority is San Juan region and Hato Rey district

Region view by Consumption - MWh



Estimated Meter Count, Consumption and \$-Value

	# Meters	kW-hrs	\$ @ .25
Aug '14	3186	17,244,337	\$4,311,084
Sept '14	3250	28,867,966	\$7,216,992

Top 5 District view by count and consumption

District	Meter Count
Sabana Llana	244
Puerto Nuevo	222
Caguas Norte	181
Rio Piedras	146
Minillas	145

District	Consumption - kWh
Hato Rey	8,681,214
Caguas Sur	4,264,240
Bayamón	3,823,187
Mayaguez	1,589,256
Ponce Sur	1,529,843

# Account Management – Shutoff Policy Compliance

Key Issue Area – Overview	Compliance with severance policy varies by customer type, regional practices and resource constraints.
Observations / Findings	<ul style="list-style-type: none"> <li>• <b>Manual interaction required for shutoffs:</b> A new severance process was documented for the CC&amp;B system go-live (April 2012), but was never operationalized into the standard procedures</li> <li>• The system does not prioritize severance of accounts and, thus, actions by the various regions can be subjective</li> <li>• All account/meter types being shutoff due to lack of payment must be manually selected to be actioned, regardless of whether the meter is a remote shutoff capable meter or one that needs to be manually shutoff at the meter</li> <li>• <b>Long cycle time for shutoffs:</b> FTI also observed that not all meters that meet criteria to be shutoff are shutoff timely.             <ul style="list-style-type: none"> <li>• For the CC&amp;B population of meters (147,000) that were shutoff, 27 days was the average time the shutoff request was made</li> <li>• It was also found that customer service shuts off meters without reflecting the action within CC&amp;B. This is primarily in the event that a customer pays quickly after a shutoff, and PREPA reconnects shortly after. The business convention is to cancel (not properly close) the field order to shutoff the account. As this happens frequently (~20,000 average per month) this tallies to a substantial amount, approximately 500,000 meters. Therefore, only ~23% of actual shutoffs are documented in CC&amp;B</li> <li>• As of September 30, there were approximately 25,000 accounts in severance condition to be triggered for shutoff, still pending disposition and execution by customer service personnel (delayed shutoffs). <b>The average pending cycle time is 118 days.</b> Had these meters been shutoff within 24 hours of severance condition, consumption would have been stopped 118 days prior and an estimated <b>\$12 million worth of additional power would not have been provided</b> (see next page)</li> </ul> </li> <li>• Regions have communicated that they cannot shutoff every meter identified for severance because of resource limitations.</li> <li>• Further challenges affect the process, as shutoff rules exist for certain clients (e.g., hospitals, communications, critical). Neither documentation nor legislation defining these special requirements could be located</li> </ul>
Recommendations	<ul style="list-style-type: none"> <li>• <b>Automate disconnects:</b> PREPA needs to automatically dispatch shutoffs. If PREPA has a concern that critical accounts are not properly coded as critical or not critical, then the population and database should be scrubbed</li> <li>• PREPA needs to revise the severance policy to make it congruent with CC&amp;B and PREPA's business process</li> <li>• Tighter controls need to be put in place in CC&amp;B with leadership oversight to monitor and drive compliance for required shutoffs</li> <li>• PREPA should relook at the procedure/policy which allows for non-recording of completed field activities in their system of record (CC&amp;B) as 77% of all shutoffs not being included in the system of record is a substantial percentage</li> <li>• <b>Shutoff delays:</b> Shutoff exceptions need to be fully interpreted, documented, and communicated for all PREPA customer service to access</li> <li>• PREPA needs to define a target and policy for shutoffs. We recommend a preliminary shutoff target of 1-5 days, after a reasonable notification period (in the US states, many utilities offer a 15 day notice of termination after a missed payment and then a 48 hour notification prior to shutoff). PREPA's origination severance date for non-payment is 50 days from the initial bill, yet the action to trigger is frequently delayed. Once required notifications are communicated, PREPA should shutoff in less than 5 days</li> <li>• Develop a KPI metric to track and highlight # of clients currently in severance condition plus average net days outstanding, yet still connected</li> </ul>
Benefits & Timing	<ul style="list-style-type: none"> <li>• This process would demonstrate to customers the consequences of non-payment and help address customer tendency to delay</li> <li>• Clarifying and re-communicating this process helps the customer service team operate consistently</li> <li>• Removing human interaction reduces the cycle time for disconnects, and reduces incremental power provided and the associated risk of further loss due to non-payment</li> <li>• Timing to initiate is short term (4-8 weeks). To stabilize and reach process capability to meet a 5-day target may take 6+ months</li> </ul>



## Account Management – Shutoff Policy Compliance

### Delayed shutoff data

- PREPA has a significant number of customers that have not paid and are eligible for shutoff, but whose power has not been shutoff
- A preliminary analysis of average time to cut power shows that a strict adherence to policy and execution of severance in a timely manner could have a significant one time impact to working capital
- For the data population of approximately 150,000 meters severed due to non-payment through September 2014, the average time to cut service was 27 days.
- PREPA policy to commence the severance condition after 50 days of non-payment, plus a period wherein internal actions must take place, plus the average time to execute result in an average time to reach shutoff 65+ days for most situations.
- A more aggressive goal would be to shutoff power within 1 to 5 days after reaching the severance criteria (50 days). The charts to the right show the impact for:
  - The population with completed shutoff which could have avoided \$17 million of power being provided if shutoff occurred one day from shutoff dispatch (a starting point greater than the 50 day mark)
  - The 25,000 meters pending shutoff are still consuming power (118 days) unless they have since been shutoff. One day disconnect would have avoided almost \$12 million of power being supplied
- PREPA in essence is providing power and extending additional credit to a population of riskier clients

### Shutoff delays (27 / 118 days) allow extended power consumption, and extend growth of an at-risk AR

Time to Cut Field Activities		Cash Flow Impact of Completing	
		Shut Off in 24 Hours <sup>1</sup>	
Days	Accounts	Average Delay	CF Impact
0 - 5 days	49,261	2.5	\$ 295,566
6 - 20 days	30,642	13.0	1,470,816
21 - 30 days	37,517	25.5	3,676,666
31 - 60 days	15,487	45.5	2,756,686
61 - 100 days	7,074	80.5	2,249,532
101 - 360 days	6,365	230.5	5,843,070
Over 360 Days	312	400.0	497,952
<b>Total</b>	<b>146,658</b>	<b>Total</b>	<b>\$ 16,790,288</b>

Potential Shut Offs Currently Pending		Cash Flow Impact of Completing	
		Shut Off in 24 Hours <sup>1</sup>	
Days	Accounts	Average Delay	CF Impact
0 - 30 days	223	15	\$ 12,488
31 - 60 days	11,423	45.5	2,033,294
61 - 100 days	4,527	80.5	1,439,586
101 - 360 days	8,593	230.5	7,888,374
Over 360 Days	222	400	354,312
<b>Total</b>	<b>24,988</b>	<b>Total</b>	<b>\$ 11,728,054</b>

<sup>1</sup> Assumes average monthly bill of \$120 per month

#### Meters shutoff

Delay Impact:

- 150k meters
- 27 Days
- \$17 million

#### Meters awaiting shutoff

Delay Impact:

- 25k meters
- 118 Days
- \$12 million

## Account Management – Chronic Disputes

Key Issue Area – Overview	Certain customers repetitively submit disputes, extending the duration of AR which cannot be collected
<b>Observations / Findings</b>	<ul style="list-style-type: none"> <li>Clients have the ability to submit a claim and protest a portion of their electric bill (per Law 33)</li> <li>Some clients consistently submit repetitive claims. The worst offender has submitted over 110 disputes</li> <li>There is currently no limit for the number of disputes which may be submitted; amounts under dispute cannot be collected</li> <li>Average duration of claims <u>closed</u> in the 12 months ended September 2014 was <b>225 days</b>. All <b>open claims = 492 days</b></li> <li><b>Act 57 should provide a deterrent for claims as it will require payment of subject bill prior to submitting a dispute.</b> However, it is suspected that open claims may be grand-fathered and this population will still need to be dealt with accordingly</li> <li><b>Current dispute balance is approximately \$21 million</b></li> </ul>
<b>Recommendations</b>	<ul style="list-style-type: none"> <li>PREPA should immediately evaluate options to address customers who submit chronic disputes</li> <li>Legal restrictions should be understood, as these claims are in dispute, however, targeted action is recommended</li> <li>The disputed client group should be stratified and reviewed for common actions (see below for one analyzed view) <ul style="list-style-type: none"> <li>The top few (high \$, low amount of accounts) should be immediately targeted for a settlement negotiation</li> <li>The low value (\$), highest occurrence should be evaluated for dismissal (refer to law 33 to law 57 implications)</li> <li>The intermediate population may require special handling and alternatives. A 75% settlement rate, offered by letter, may convince a majority of this category of clients to pay.</li> </ul> </li> <li>These accounts should also be evaluated for increasing security deposits as they may be considered high risk</li> <li>To prepare for the full impact of Act 57, PREPA will need to modify its procedures and CC&amp;B, as significant changes are enacted</li> </ul>
<b>Benefits &amp; Timing</b>	Addressing these accounts, receiving monies due and curtailing future occurrences supports cash flow. Action within 4-6 weeks

### Overview of Disputed Accounts, Claims and Balances

#### Disputed Claims Detail

Disputed Service Agreements Per Account	Number of Accounts	Total Disputed Balance	Average Balance Per Service Agreement	Average Balance Per Account
1	10,298	\$ 8,222,185	\$ 798.43	\$ 798.43
2-5	1,900	6,677,692	1,395.55	3,514.57
6-10	114	287,086	350.11	2,518.30
11-20	44	91,649	142.31	2,082.94
20-40	53	5,411,525	3,480.08	102,104.24
42	1	346	8.25	346.48
54	1	1,758	32.56	1,758.00
<b>Totals</b>	<b>12,411</b>	<b>\$ 20,692,242</b>	<b>\$ 1,134.07</b>	<b>\$ 1,667.25</b>

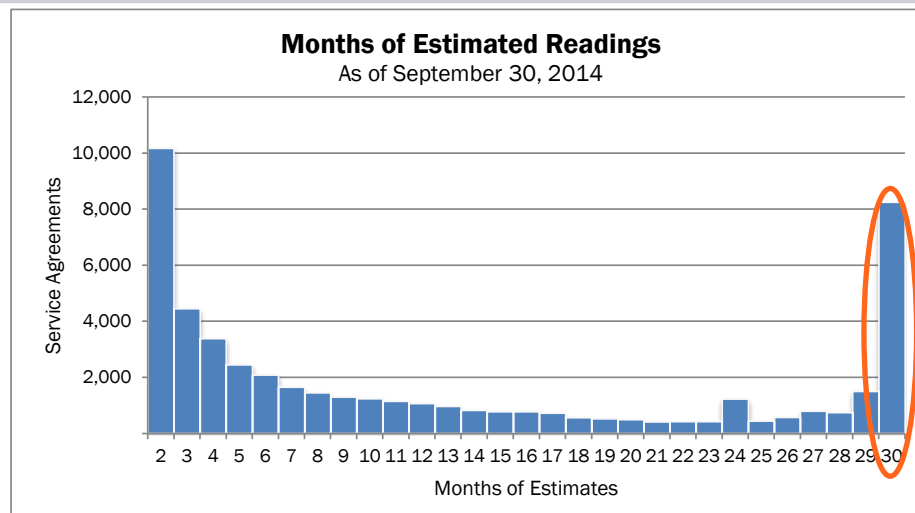
Prioritizing accounts with multiple service agreements / large balances could have biggest impact.

While the largest balance is with single disputes, many of these accounts are expected to quickly be resolved



## Account Management – Estimated Accounts

Key Issue Area – Overview	Multiple accounts have had meter consumption estimates for extended periods without being addressed
<b>Observations / Findings</b>	<ul style="list-style-type: none"> <li>Estimated meter readings have been a factor causing customers to delay or not pay their bill and to submit a claim (Law 33)</li> <li>There were estimated meter readings of 6.44% of the total population for Sept '14 which is up 17% since the start of 2014</li> <li>The APPA benchmark from other utilities in the U.S. reflects that the mean value is less than 1% meter read estimates</li> <li>Over 50,000 accounts have had repeat estimates, with over 21,000 having repeats for one year or more</li> <li>A large number of meters have been estimated for periods of greater than two (2) years, with a large amount (&gt;8000) having been estimated since the CC&amp;B system go-live</li> <li>Consumption may be estimated for multiple reasons. Three of the most common drivers include: 1) Failure of Automatic Meter Read (AMR) 2) Meter is inaccessible 3) Meter read falls outside HI-LO review tolerances (1% - 300%)</li> <li>Estimated readings result in inaccurate bills (+/-) which affects accuracy of receivables</li> <li>Estimated readings not only affect the month being estimated, they also impact the month when a reading is finally made</li> <li>Poor estimates can be a cause of customer dissatisfaction especially if bills vary notably higher than expected; particularly during the true-up month</li> </ul>
<b>Recommendations</b>	<ul style="list-style-type: none"> <li>A focused program should be implemented quickly to address accounts with meters that have been estimated for long durations and action taken to resolve the situation – replace/relocate meter or other</li> <li>After addressing the large backlog of high count estimated meters, PREPA should define internal thresholds for an acceptable count of maximum meter reads and institute action plans to address (e.g. 10 months max)</li> <li>Estimated Accounts should have a PMO based program with a project manager to drive actions</li> </ul>
<b>Benefits &amp; Timing</b>	<ul style="list-style-type: none"> <li>Identification, control and reduction of chronic and systemic account estimates will improve billing accuracy, positively affect payments and also may improve customer satisfaction.</li> </ul>



30 months is the approximate time from the CC&B system implementation to this data/report generation period

## Account Management – System Account Transactions

Key Issue Area – Overview	Transactions are not entered quickly into the customer service system and in some cases transactions are not being properly completed. Other system updates are required to improve data integrity
Observations / Findings	<ul style="list-style-type: none"> <li>During evaluation of the field activity to disconnect services, FTI noted a large discrepancy in the count of system records provided by different departments within PREPA</li> <li>CC&amp;B indicated that almost 147,000 disconnects have been processed per the information services team</li> <li>Customer service communicated that more than 500,000 additional disconnects were completed in the same period, yet were not recorded within CC&amp;B, due to their functional process to reconnect customers within a 24 hour target period</li> <li>Customer service reported several causes that may have contributed to this discrepancy: <ul style="list-style-type: none"> <li>Business work-around to facilitate speed and reduction of CC&amp;B data entry processing (shutoff requests are canceled in the system, even when they have actually been completed prior to a reconnect)</li> <li>Field offices are frequently behind in processing paperwork for completed field activities</li> <li>After the CC&amp;B conversion there were many operational issues affecting system compliance and accuracy (many of which were reported as not being addressed until after November 2013)</li> </ul> </li> <li>A large portion of field activities affect billing. PREPA estimated that entry into the system may lag by over one month due to work load, prioritization and resource constraints</li> <li>Field activities completed and not entered into the system can cause multiple negative scenarios including: <b>delayed or non-billing</b> of field activities and electric consumption, <b>over-billing</b> for terminated services (in the case of receiving automatic bill estimates), risk for wasted work effort if resources are erroneously deployed to support an activity which was already completed, and overall system data integrity concerns</li> <li><b>Customer disputed claims</b>, once resolved, must be properly closed in CC&amp;B with the pending funds moved to the appropriate account (generally for payment due or write-off). Review of closed dispute cases showed that many have <u>not</u> been properly and completely executed in CC&amp;B. In many cases disputes were closed, but pending amounts have not been transferred as per the required procedure. These amounts cannot be collected, under law 33. The amount needing action is \$1.6 million (as of September)</li> <li><b>PREPA has only four (4) SA codes available for payment plans.</b> All four SA codes are associated with residential revenue codes</li> <li>Commercial accounts are occasionally placed on a payment plan, and when they are activated the corresponding SA code is categorized as “residential,” while the account is commercial. This causes data discrepancies when conducting analysis of the different revenue categories. For example, during FTI’s analysis, several hospitals showed up with residential revenue billing codes</li> </ul>
Recommendations	<ul style="list-style-type: none"> <li>PREPA needs to take action and institute controls related to system compliance. Reevaluate the business process decision to knowingly exempt records for field activities from being required to be entered into the CC&amp;B system</li> <li>Customer service leadership should communicate and enforce policy and process requirements for data entry timeliness (target same or next day)</li> <li>Regional and district offices should develop a process to physically differentiate paperwork which is associated with billing. For example, all field order requests may be marked with a green emblem in the bottom corner to make this population more visible. When paper work is submitted, two bins should be available, one for billable work (green) and the other for all other non-billing activity. All billable (green) activities are to be processed first</li> <li>In the longer term, PREPA must consider enabling an improved field technology (such as handhelds) which will enable automatic data transfer from the field as activities are completed; this reduces time delays, increases accuracy, eliminates double handling</li> <li>Institute policy and quality control checks to drive system compliance for dispositioning and closure of all dispute/claim cases. When cases are actually closed without properly transferring balances, AR amounts are stuck in a condition that is not collectible</li> </ul>

# Account Management – System Account Transactions (continued)

<b>Key Issue Area – Overview</b>	<b>Transactions are not entered quickly into the customer service system and in some cases transactions are not being properly completed. Other system updates are required to improve data integrity</b>
<b>Recommendations</b>	<ul style="list-style-type: none"><li>• Create new SA codes in CC&amp;B to appropriately classify payment plans for non-residential customers. Payment plan balances related to commercial accounts should be transferred to new SA's</li></ul>
<b>Benefits &amp; Timing</b>	Timely billing of customers for field activities with associated cash flow benefits, process compliance to business rules, system-data integrity improvement

## Account Management – Law 73 Voucher Submittals

Key Issue Area – Overview	Law 73 vouchers (subsidies to industrial customers) are submitted to the Treasury once every ~180 days
<b>Observations / Findings</b>	<ul style="list-style-type: none"> <li>Law 73 is a Puerto Rico law developed to attract industrial business growth by providing incentive subsidies, in the form of payment allowance vouchers to qualifying companies</li> <li>Industrial customers who qualify for this program receive vouchers from the government, which in turn are submitted to PREPA in full or partial payment of their electricity bills</li> <li>PREPA stated that their practice has been to submit these vouchers, in aggregate, to the Treasury for payment approximately once every 180 days <ul style="list-style-type: none"> <li>Consistent with this only three submittals were processed since July 2013. The average age of vouchers at time of submittal was approximately 6 months or 185 days. Total amount was \$33.3 million</li> </ul> </li> <li>After PREPA submits the vouchers for reimbursement, there is additional processing time on the side of the Treasury. Further, in the case of the recent submittals, the Treasury communicated that they may prefer to reimburse PREPA weekly</li> <li>Law 73 has no restriction, or required waiting period, which would require a 180-day delay</li> <li>FTI communicated this observation to PREPA outlining the improvement opportunity</li> <li>PREPA's Wholesale Department confirmed its intention to target monthly submittals, starting in November 2014 and to continue with a policy to submit on the last day of the month (adjusted only for weekends or holidays)</li> <li>As of September 2014 the balance in SA account ELAW73, which holds the net balance for this subsidy program, was approximately \$17 million</li> </ul>
<b>Recommendations</b>	<ul style="list-style-type: none"> <li>PREPA needs to institute this as a locked-down process to ensure that monthly transmittal of on-hand vouchers occurs</li> <li>PREPA's departments involved in this process (Wholesale Department, Finance) should co-develop the procedure to ensure it is comprehensive</li> <li>This process should be integrated into one of PREPA's business systems that will automatically trigger a required action and eliminate any risk of human scheduling error; this should not be treated as a manual reactive process</li> </ul>
<b>Benefits &amp; Timing</b>	Decreasing AR and receiving payments (subsidy voucher credit recovery from the Treasury) earlier increases cash flow and should be a relatively easy initiative to execute consistently

### Law 73 Voucher Submittals

Period Covered	Year	Amount (millions)	# Months covered	PREPA Internal Approval Date	Wait Time (min to max) - Months	Wait Time (min to max) - Days	+ Delivery Date to Treasury	Payment Date from Treasury
July - December	2013	\$9.7	6	September 19, 2014	9-14	270-420	10/1/2014	tbd*
January - June	2014	\$8.0	6	September 19, 2014	3-8	90-240	10/1/2014	tbd*
July - October	2014	\$15.6	4	October 31, 2014	0-3	0-90	tbd	tbd
<b>Totals</b>		<b>\$33.3</b>	<b>22</b>		<b>6.2 average</b>	<b>185 average</b>		

\* Treasury suggested they may submit partial, weekly payments

## Account Management – Credit Checks

Key Issue Area – Overview	PREPA does not conduct credit checks prior to opening new customer accounts
Observations / Findings	<ul style="list-style-type: none"><li>• PREPA does not perform credit checks for new customers</li><li>• Payment risk for new customers cannot be properly assessed without credit information</li><li>• Many U.S. electric utilities perform credit checks and use this information to assess risk and adjust deposit levels. In some cases utilities may decline offering service, though it is our understanding that, by law, PREPA is not able to deny service</li><li>• PREPA does require prepaid deposits to guarantee service for most accounts. For residential accounts this is a pre-established amount based upon the address of the service and is not based on credit ratings</li></ul>
Recommendations	<ul style="list-style-type: none"><li>• Institute credit check process prior to new account initiation</li><li>• Develop corresponding risk-based security deposit schedule and set new account deposits according to credit rating, other risk factors and anticipated consumption</li><li>• A similar risk-based process should be implemented for accounts that have been shutoff for non-payment, before service is reconnected</li></ul>
Benefits & Timing	Assessing credit risk prior to opening accounts or reconnecting service will allow PREPA to align security deposits with credit risk, mitigating future payment default losses

# Processes & Measurements – Procedure Compliance and Maintenance

Key Issue Area – Overview	Collections employees often do not utilize the most current documented procedures. Many procedures are outdated.
<b>Observations / Findings</b>	<ul style="list-style-type: none"> <li>• During FTI's analysis, PREPA personnel demonstrated inconsistent understandings when asked about processes and procedures used in the performance of their responsibilities</li> <li>• Two sets of procedures currently exist: PREPA's historic procedures (~120 count) developed as part of its quality management system and a separate set of procedures that were developed during the system conversion to CC&amp;B (~50 count)</li> <li>• According to PREPA, the procedures developed during the CC&amp;B conversion (April 2012) were not distributed throughout the organization and most personnel do not have access to them</li> <li>• In general, the older procedures were not revised to reflect functional changes introduced during the system conversion</li> <li>• Further review of the older procedures used by customer service showed that most have not been updated for extended periods of time (on average more than 10 years)</li> <li>• As a result, many of the processes and procedures actually in use by PREPA are not completely documented, resulting in risk related to controls and consistency</li> <li>• It is industry standard for businesses following a quality management system (QMS) to review and update procedures on a periodic basis (typically a minimum of every two or three years)</li> </ul>
<b>Recommendations</b>	<ul style="list-style-type: none"> <li>• PREPA should have only a single set of processes and procedures</li> <li>• All procedures should be updated/refreshed to follow PREPA's current business practices/procedures and aligned with CC&amp;B functionality</li> <li>• Communicate and retrain personnel to know what procedures they should be following, where to locate them, what to do if they do not understand a procedure, and how to communicate an issue if they find one within a procedure</li> <li>• Consider appointing a dedicated quality manager – a key role within customer service to support many needed processes and customer improvement activities (above and beyond merely addressing the need to update all existing procedures)</li> <li>• Institute a policy for auditing procedures and compliance with procedures moving forward</li> </ul>
<b>Benefits</b>	<p>Maintaining and following a structured and well managed quality management system with associated standard policies, processes and procedures formulates the basis for a sound quality foundation, reducing errors and risk related to inconsistencies in application and confusion regarding such procedures</p>

# Processes & Measurements – Procedure Compliance and Maintenance

## ■ Observation details

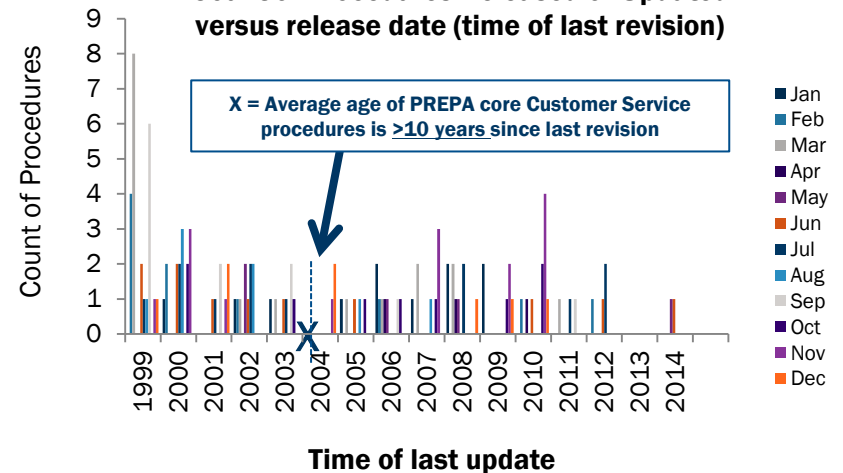
- 50+ procedures were co-developed by PREPA and PriceWaterhouseCoopers in April 2012, yet never were distributed or integrated into the pre-existing PREPA core procedures
- These procedures are of good quality and should be leveraged and integrated into the mainstream documented procedures that PREPA uses both as control documents and as a reference for training programs
- Operating procedures (not updated during CC&B, April 2012), and referenced as PREPA's standard are **>10.1 years old** on average. Twenty four procedures have not be modified since 1999. Since the CC&B go-live, only five procedures have been modified or released
- PREPA should launch a holistic procedure review and revamp, including merging CC&B procedures with the base procedures and ensuring that they are contemporary and consistent with current laws



Count of Procedures by Age (last revision)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2014					1	1						
2013												
2012		1				1	2					
2011			1				1		1			
2010		1		1		1				2	4	1
2009	2									1	2	1
2008	2		2	1	1		2					1
2007	1		2					1		1	3	
2006	2	1	1	1	1				1	1		
2005	1		1			1		1		1		
2004											1	2
2003	1		1			1	1		2	1		
2002	1	1	1		2	1	2	2				
2001						1	1		2		1	2
2000	1	2				2	2	3		2	3	
1999		4	8			2	1	1	6		1	1

Count of Procedures Released or Updated versus release date (time of last revision)



# Processes & Measurements – Metrics, Dashboard Utilization, Benchmarking

Key Issue Area – Overview	Dashboards and metrics are not fully utilized to benchmark, measure, and manage operations
<b>Observations / Findings</b>	<ul style="list-style-type: none"> <li>• Customer service leadership has made improvements in the KPI/Metrics reporting process, however, there is a gap to industry standards and a lack of target/goal establishment</li> <li>• A number of important metrics are missing and there is a lack of reference to relevant benchmarks (see next page)</li> <li>• PREPA's KPI package is compiled on a monthly basis, but such metrics are not available on a more frequent and timely basis that would enhance their usefulness in managing the business</li> <li>• There is an opportunity for PREPA to develop daily/weekly operating dashboards to help regional managers improve operations</li> <li>• PREPA does not routinely benchmark itself against other utilities</li> <li>• CC&amp;B is a data rich tool but its capabilities are not being fully utilized</li> <li>• The Customer Service department lacks documented mission and vision statements and well published metric goals</li> </ul>
<b>Recommendations</b>	<ul style="list-style-type: none"> <li>• Metrics require a baseline, current status level and a target (targets may reference, or explicitly be based on, benchmark data) to be effective</li> <li>• Re-evaluate metric/KPI reporting, establish additional metrics (see next page for suggestions)</li> <li>• Incorporate the best practice of reporting and improving metrics on a process-flow basis, frequently referred to as a “Meter-to-Cash” initiative. Under this approach, reporting and actioning follows the workflow stream, providing insight to process interactions, key linkages or gaps</li> <li>• Develop an active benchmarking program and use results (where applicable) to set targets and understand areas of weakness. Targets should be developed for all metrics</li> <li>• Establish dashboards (through CC&amp;B or other) for key operating levels to improve performance</li> <li>• Leadership dashboards should be posted and broadly communicated for business personnel to see progress and understand goals</li> </ul>
<b>Benefits</b>	<p>Metrics and dashboards, when properly developed and implemented, can help a business achieve notable improvements. Tracking the right measures, setting realistic targets, communicating them, and addressing underperformance will have a positive impact on the business</p> <p>Good benchmarking data and processes will help set realistic targets for PREPA</p> <p>Publishing and frequently communicating the mission, vision and key objectives will set a common course and direction for the team, ensuring that actions taken are consistent with PREPA goals</p>



# Processes & Measurements – Metrics, Dashboard Utilization, Benchmarking

## Key metrics missing targets or not being reported in monthly executive package

- For metrics without targets, they should be developed. For metrics not reported, PREPA should prioritize and introduce these metrics with targets

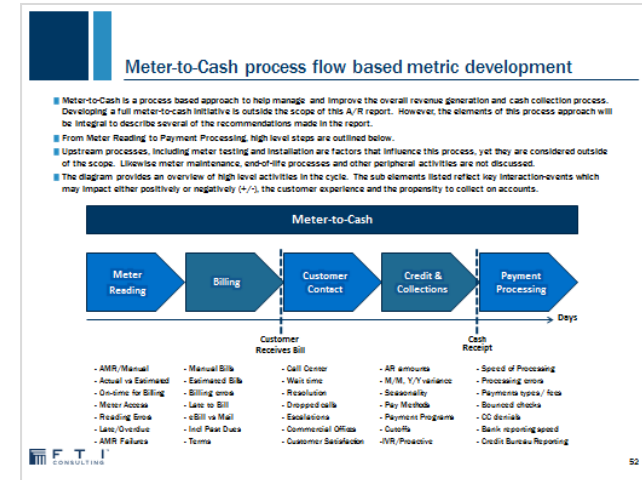
### Missing Targets/Goals

- #/% estimated meter reads
- % unbilled accounts
- # calls at call-center, call wait time/dropped calls
- wait time in commercial offices
- % targets by pay mechanism
- % paperless bill
- % target by aging buckets,

### Not Yet Reported

- # shutoff due to non-payment for period
- Avg time to shutoff service (for non-payment)
- # backlog to be shutoff (in severance condition)
- # delinquent shutoffs and aging
- # reported to credit bureau
- # accounts with chronic estimates
- # accounts with chronic disputes/claims
- # meters with inactive SA having consumption
- # meters with no client/account/SA and consumption
- billing accuracy
- FA backlog
- average days to pay-ADP
- days sales outstanding-DSO
- # active disputes
- # accounts on payment programs
- customer satisfaction metrics (many options)

## Illustrative view of a Meter-to-Cash process flow metric model



## Key metrics should be re-baselined with new targets on a periodic basis (baseline annually, targets monthly, quarterly or annually)

**Key Metrics – Baseline, Current, Target**

Key Metrics			
Metric	Baseline	Current	Target
<b>Meter Infrastructure:</b>			
- % AMR			
- % Remote Disconnect			
<b>Meter Read Quality:</b>			
- % Accurate			
- % Successful AMR reads			
- % Estimated			
- % High-Low Flagged			
<b>Billing Quality:</b>			
- Timeliness %			
- % Accurate			
- # Unbilled Accts			
<b>Field Execution:</b>			
- % FA/Services completed 24hrs			
- FA Backlog			
<b>Call Center Performance:</b>			
- Wait Time			
- % Dropped Calls			
- % Resolution 1 <sup>st</sup> Effort			
<b>Commercial Office Perf:</b>			
- Wait Time			
- % Resolution			
<b>Collections/AR:</b>			
- Ave Days-to-Pay (ADP)			
- Days Sales Outstanding/DSO			
- AR Total/\$			
- Customers w/AR 60+ Days-%			
<b>Customer Issues:</b>			
- # Active Claims			
- % Claims Upheld			
- # Accts on Payment Plans			
- # Delinquent Cut-Offs			
- # Sent to Credit Bureau			

**Requires Targets and Action Plans to Achieve**

FTI CONSULTING

# Processes & Measurements – Root Cause Analysis and Sharing of Best Practices

Key Issue Area – Overview	Minimal root cause analysis evaluations for top issues; limited evidence of best practice sharing
<b>Observations / Findings</b>	<ul style="list-style-type: none"><li>• PREPA has no standardized root cause analysis (RCA) process to analyze issues related to collections/customer service</li><li>• RCA programs and RCA tools provide analysis methodologies to help uncover unknown root causes</li><li>• Customer Service would benefit from a strong RCA program to help address and improve systemic issues.</li><li>• An overview of a general RCA approach as well as a listing of simple tools is shown on the next page</li><li>• During reviews with customer service, FTI noted that best practices were not always broadly shared across different areas. For example, certain strong processes used in one region to manage top wholesale clients were not shared or documented to help support other regions</li></ul>
<b>Recommendations</b>	<ul style="list-style-type: none"><li>• PREPA should evaluate the costs and benefits of root cause analysis programs and consider development and implementation</li><li>• Regarding best practices, processes should be put in place to better identify and encourage sharing and acceptance of such practices across the organization</li></ul>
<b>Benefits</b>	<p>RCA would provide a standardized process for identifying and resolving underlying causes related to the collections process and customer service.</p> <p>By implementing a program to share best practices, PREPA can more quickly and efficiently improve processes related to its collections efforts.</p>

# Processes & Measurements – Root Cause Analysis and Sharing of Best Practices

- Several commercial root-cause-analysis software programs (such as Taproot™ or Apollo™) are available
- Individual tools supporting root cause analysis can be used on a selective basis. A list of typical tools is shown below
- The outline of a typical five step root cause analysis model is outlined below

## Root Cause Analysis Process Overview (5 Step Model)

### ■ Step 1: Define the Problem

- What is the issue you need to address?
- What are the specific symptoms?

### ■ Step 2: Collect Data

- What data and proof exists about the problem?
- When did the problem start?
- What is the impact of the problem?

### ■ Step 3: Identify Possible Causal Factors

- What is the sequence of events or activities leading to the problem?
- What condition(s) allow the problem to occur?
- Are there other problems occurring in addition to the main issue?

### ■ Step 4: Identify the Root Cause(s)

- Why does the causal factor exist?
- What is the real reason the problem occurred?

### ■ Step 5: Recommend and Implement Solutions

- What can you do to prevent the problem from happening again?
- How will the solution be implemented?
- Who is responsible to own and implement the solution?
- What are the risks of implementing the solution?
- How will the corrective actions be monitored and controlled?

## Common Root Cause Analysis Tools:

Failure Modes and Effects Analysis  
Pareto Analysis & Diagrams  
Cause and Effect Diagrams  
Change Analysis  
Tree Diagrams  
5-Whys?  
Barrier Analysis  
Fault Tree

## Processes & Measurements – Improving Client Pay Patterns

Key Issue Area – Overview	No mechanisms exist to reduce clients' tendency to delay payment until severance day.
<b>Observations / Findings</b>	<ul style="list-style-type: none"> <li>• In September 2014, approximately 12,000 customers waited until just before severance to pay their bills</li> <li>• PREPA's processes and procedures related to severance may actually encourage certain clients to delay payment to the last possible moment: <ul style="list-style-type: none"> <li>• For secondary accounts, PREPA attempts to collect at the time of severance</li> <li>• Fees for reconnected service are low</li> <li>• Reconnections are prioritized (same or next day)</li> <li>• Interest charged on past due accounts is low and not reflective of the credit risk of these accounts</li> <li>• Security deposits are not increased to reflect the increased credit exposure</li> </ul> </li> <li>• Reconnection fees (\$10 for subsidized accounts and \$25 for other residential) are not believed to cover the cost of the service. Use of overtime increases this gap</li> <li>• PREPA prioritizes reconnections and has a goal of reconnecting service within 24 hours once the account payment is cleared (~96% connections are completed within one day). Conversely, the average time to disconnect services for non-payment is approximately 27 days</li> </ul>
<b>Recommendations</b>	<p>PREPA should revise its processes and charges related to severance for non-payment:</p> <ul style="list-style-type: none"> <li>• Increase fees for reconnects to, at a minimum, cover all costs associated with the reconnection. Consider pricing at a level of 2X or more relative to a new service connection to act as a disincentive for non-payment/loss of service and to help defray costs associated with collection efforts</li> <li>• Reduce priority for reconnects. Though the reconnect time should be reasonable, factors such as commitments to paying customers, incremental overtime, etc. should be considered when scheduling reconnects</li> <li>• Increase interest charges associated with late payment. Interest charges for late payments are low, at just 2/3% per month (8% per annum), versus much higher credit card financing and penalty rates</li> <li>• Re-evaluate (increase) security deposits for accounts to be reconnected to reflect the increased non-payment risk associated with such accounts (by law, PREPA is allowed to increase the security deposits for customers with a history of payment issues up to 3x the customer's average 12 month billing history)</li> <li>• PREPA should strictly adhere to its severance policy to ensure that severance for non-payment is completed on a timely basis</li> <li>• The above suggestions make business sense in isolation and, in combination, should act as a powerful disincentive to substantially delaying payments and risking service severance</li> </ul>
<b>Benefits</b>	<p>Shorter delays in payment with the resulting working capital improvement, reduction of distracting service severances, and improved profitability through higher fees and interest</p>

## Customer Service Experience – Communication Program

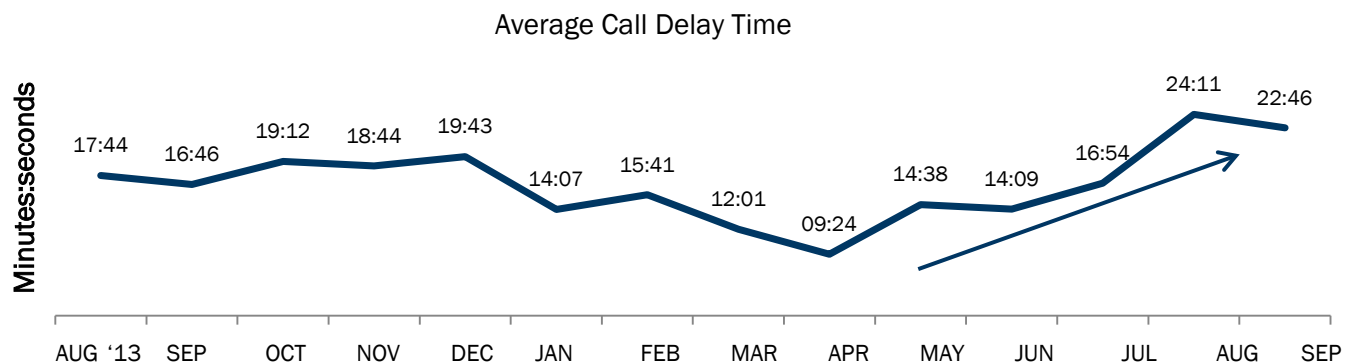
Key Issue Area – Overview	Important policy changes (payment, collections, theft) should be clearly communicated to clients
<b>Observations / Findings</b>	<ul style="list-style-type: none"> <li>This report on PREPA's AR, billing and collections activities recommends multiple policy and procedural changes</li> <li>Many recommendations will not be impactful if they are not communicated to clients properly</li> </ul>
<b>Recommendations</b>	<ul style="list-style-type: none"> <li>Once PREPA has formulated a plan related to its collections and related processes, it should embark upon a well-constructed communications program relating to changes that will directly impact clients</li> <li>The program should be carried out over a period of time and articulate, to the extent applicable, such items as: <ul style="list-style-type: none"> <li>PREPA's commitment to its new program</li> <li>Consequences of non-payment or slow payment (reporting to credit agencies, increased interest, etc.)</li> <li>Consequences of being severed (possible delays in being reconnected, higher fees, increased deposits, etc.)</li> <li>The danger of electricity theft, PREPA's commitment to prosecuting it, any reward programs for reporting it, and announcements about new anti-theft task forces, etc.</li> <li>Potential programs to resolve outstanding receivables, etc.</li> </ul> </li> </ul>
<b>Benefits</b>	<p>Broad and well orchestrated communications can have a significant impact on customer awareness, perception and acceptance of changes, improving the effectiveness of such changes</p> <p>Leverage the requirement under Act 57, which requires a new "transparent" customer billing statement, to incorporate communications regarding PREPA's new policies and associated enforcement plans</p>

## Customer Service Experience – Call Center Performance

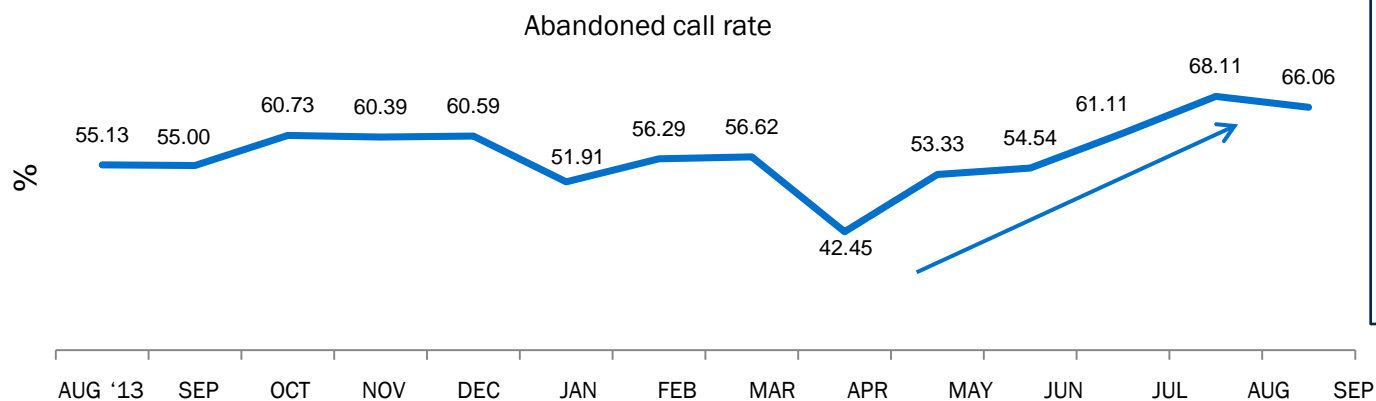
Key Issue Area – Overview	Call center performance lags behind industry standards. Customer perception is not favorable
<b>Observations / Findings</b>	<ul style="list-style-type: none"> <li>• Review of the call center operations reflects sub-par metrics; trends have generally deteriorated over the past six months</li> <li>• Based on the lagging metrics and a high level of hang-ups, it can reasonably be assessed that the call center is not helping to improve customers' satisfaction levels</li> <li>• cursory benchmarks show that many utilities have far better metrics and demonstrate an ability to meet customers' expected response times -- typically measured in seconds or up to a few minutes under normal circumstances</li> <li>• PREPA's call center wait time is over 20 minutes, with callers abandoning the call over 60% of the time</li> <li>• A small pilot to outsource a portion of the call center activity has recently been deployed to augment staffing levels</li> </ul>
<b>Recommendations</b>	<ul style="list-style-type: none"> <li>• Launch a re-engineering design effort for the call center. There will likely need to be a massive change in operations; small incremental improvements are unlikely to have much of an impact</li> <li>• Consider scaling the existing outsource pilot, once metrics and positive performance are confirmed</li> <li>• Evaluate benefits of outsourcing on a larger scale basis with a company whose core competency is call-centering</li> </ul>
<b>Benefits</b>	<p>Improvements in the customer call center performance would be a positive contributor to customer perceptions and attitude</p> <p>While it is difficult to attach a monetary value to improved call center performance, the inability (on a practical basis) of customers to contact PREPA to discuss their issues is likely a significant contributor to disputes, delayed payments and, possibly, theft</p>

## Customer Service Experience – Call Center Performance

- Two important measurements relating to call center performance are wait time and dropped call rate
- The average call delay is greater than 15 minutes and for the past two months exceeded 20 minutes
- Abandoned call rate, percentage of callers who hang up prior to speaking to a call center representative, typically exceeds 50%
- As seen below, the trends since April 2014 have been negatively increasing, with only minor recovery in September
- Customers who cannot get their issues addressed likely have lower satisfaction and may become an increased risk for non-payment



- Upward (unfavorable) trend over past 6 months for call wait time
- Slight improvement month-over-month with September at 22:46 min:sec
- Best results during April which was the only month below 10 minutes
- Customers typically perceive wait times on the order of seconds or a few minutes (maximum) to be acceptable



- Upward (unfavorable) trend over past 6 months for abandoned call rate
- Slight improvement month-over-month with September at 66% (Of 10 callers only about 3 of them hold on long enough to speak with an agent)
- Long wait times and frequent hang-ups contribute to customer dissatisfaction – potentially leading to slow or non-payments

## Customer Service Experience – Understanding Non-payment

Key Issue Area – Overview	The issue of high receivables has no root cause evaluation as to why customers don't pay
<b>Observations / Findings</b>	<ul style="list-style-type: none"> <li>• Common feedback as to why customers don't pay was simply "customers just don't have money"</li> <li>• While lack of funds may be a top driver for non or late payments, without data it is a hypothesis at best</li> <li>• Root causes must be understood if an improvement program is being pursued</li> <li>• PREPA does not currently have a process to seek feedback as to why customers do not pay. On a case-by-case basis, some personnel enter data in a free-form field in CC&amp;B to capture customer explanations. This approach is ad hoc, non-systematic, and not easily searchable for analysis purposes</li> </ul>
<b>Recommendations</b>	<ul style="list-style-type: none"> <li>• To understand why customers do not pay, PREPA should consider capturing data from customers</li> <li>• A simple pilot survey can gather feedback as to why customers are not paying</li> <li>• Start a small pilot in commercial centers, and develop a simple script for the call center. Generically, the customer should be asked in a sincere for feedback as to why they can't pay, or do not want to pay. By asking the question, the dialogue will be started to gather important customer feedback. Reason codes and data capture can be accomplished within CC&amp;B to make the data accessible</li> <li>• PREPA should perform a simple root-cause exercise such as Failure Modes and Effects Analysis or Fishbone diagrams in an effort to understand why customers do not pay</li> </ul>
<b>Benefits</b>	<p>Understanding real customer issues and how a business might address them to be mutually beneficial for both the company and the client is a sound element for a positive customer service program. Understanding and addressing customer issues in a fair and timely manner should foster improved customer perception and cooperation, improving collections</p>



# Customer Service Experience – Customer Satisfaction Program and Metrics

Key Issue Area – Overview	No evidence of specific programs or focused efforts to measure, understand and improve customer satisfaction
<b>Observations / Findings</b>	<ul style="list-style-type: none"> <li>During interviews with customer service personnel and members of other functions throughout PREPA, it was common feedback that customer perception of PREPA was low, yet management has stated that customer satisfaction is important to PREPA</li> <li>Some of PREPA's internal metrics/KPI's measure items, which may be indicative of customer satisfaction, yet there is no process to survey or measure customer feedback and to generate a proxy for customer satisfaction levels</li> <li>Utilities across U.S., such as PPL Electric Utilities, have published positive experiences and results stemming from their implementation of customer service programs and initiatives</li> <li>PREPA has many customer experience exposure points, including the call center, commercial offices, and field activity personnel from which they could readily gather data without excessive effort</li> <li>Customer satisfaction is believed to be correlated to some extent to payment activities</li> </ul>
<b>Recommendations</b>	<ul style="list-style-type: none"> <li>KPI's must be specifically developed to baseline and use to track improvement</li> <li>While metrics should be formulated from the customer perspective and with input from customers, a few metrics that may be considered as a starting point include: customer satisfaction score, reduction in estimated bills, reduction in # of complaints, and in-person survey scores from the commercial centers or field activities</li> <li>PREPA should evaluate feedback from customers to identify specific areas where improvement activities can be launched to support improvement of customer facing activities and customer perception points</li> <li>Top US utilities with high customer service ratings from J.D. Power including: PPL Electric Utilities, PSE&amp;G, MidAmerican Energy, Georgia Power can provide good benchmarking opportunities</li> <li>J.D. Power lists 6 main factors affecting overall customer satisfaction, including: power quality and reliability, billing and payment, corporate citizenship, price, communications, and general customer service. Coupled with customer feedback, PREPA should consider developing initiatives around these customer impact areas</li> <li>KPI's and program updates should be a key topic at the Executive Director's staff meeting on a regular basis</li> </ul>
<b>Benefits</b>	Benefits of a well implemented customer satisfaction improvement program can provide many benefits, including customer cooperation and, likely, improved collections

## Customer Service & Collections – Additional Opportunities

### Potential Cost-Savings and Operational Improvement Observations

#### ■ Meters

- Finish AMR meter installs from on-hand inventory
- Develop meter end-of-life programs
- Evaluate pre-pay or pay-per-use meters
- Tracking for meters in process/transit

#### ■ Billing

- Shutoff paper bills (< ½% are paperless today)
- Post and publicize paper opt-out options (eBill and website)
- Analyze lower cost options for bill printing/mailing

#### ■ Pay Programs

- Evaluate discounts for early pay or shifts to no-paper bill
- Educational programs to support low-income customers
- Pre-pay plans, with incentives
- Payment kiosks to improve speed and provide self service

#### ■ Commercial Offices

- Consolidation/Rationalization analysis
- Institute fees to pay at a commercial office
- Training and coaching program to improve collections

#### ■ Call Center

- Process and script improvement and documentation
- Training and coaching program to improve collections
- Add \$-saving ideas to phone-loop during call center hold period

#### ■ Field/disconnection services

- Evaluate workforce management tools (automated handhelds)
- Install Gen-3 remote disconnect meters, for all reconnects (risk)

#### ■ Other Revenue Leakage

- Right size Theft (ICEE) department to large opportunity size

***Many additional opportunities for cost reduction and continuous improvement***



FTI Capital Advisors, LLC is a member of FINRA/SIPC.

# Government Receivables

# Government Customers: Key Issues and Recommendations

## Key Issues

### Government Clients' Ability to Pay

- Many of the Puerto Rico public corporations are experiencing liquidity issues due to significant operating losses, lack of funding and heavy debt burdens
- For many of these corporations PREPA is usually one of the last vendors paid due to the other factors listed below
  - Some clients have refused to make partial payments on current bills
- When public corporations receive funds from the General Fund to supplement their operating budgets, these funds are either not earmarked for PREPA, or are used by the public corporations for other purposes
- For Puerto Rico government agencies the approval process and the resulting payment by Hacienda can take 4-6 months

### Lack of Enforcement Mechanisms

- PREPA has not shut-down power to a government client in the past 10 years
- The last attempt to shutoff the power at a government entity was 3 years ago, and was unsuccessful
- PREPA has a history of threatening to shutoff power or not to provide new services, but has failed to execute on those threats, conditioning clients to disregard them

### Lack of Standard Escalation Process

- Standard processes and procedures for government collections date to 2003, and, due to a combination of prior government interference and changes in administration at PREPA and other public corporations, the established escalation processes are not followed

## Recommendations

- Engage with the government of Puerto Rico regarding long-term solution for resolving debts of public corporations (see next page)
- Pursue agreement with the Central Government that for the top public corporations with outstanding receivables, budget supplements provided by the General Fund will include obligations to PREPA and will be paid directly to PREPA
- Continue discussions with the Budget Office regarding delinquent accounts for agencies, their efforts to ensure payment, and fix the payment processes at delinquent agencies

- Prepare list of non-critical locations at government entities that can be shutoff (draft completed by PREPA)
- Embed cut-off policy into updated procedure and policy document, which is to be provided to the Energy Commission
- Engage the Central Government and the Energy Commission over the need to shutoff power at non-critical locations as provided for in Act 57
- Select a non-critical location to "make an example of" and proceed with cutting off power

- As required under Act 57, PREPA should refresh its formal procedures regarding government collections to include a standard escalation policy
  - Compliance with this process must be tracked

# Potential Options for Discussions with Government Regarding Public Corporations

Option	Benefits	Negatives
Allow PREPA authority to shutoff power at non-critical locations	<ul style="list-style-type: none"> <li>Increases priority of obligations to PREPA for public corporations</li> <li>Does not impact electricity rates</li> <li>Would not increase financial burden on the government of Puerto Rico</li> </ul>	<ul style="list-style-type: none"> <li><b>May not resolve debt balance with public corporations for PREPA</b></li> <li>Not applicable to all public authorities</li> <li>Does not address long-term sustainability of payments by public corporations</li> </ul>
Direct negotiations, with support from government, regarding payment plans	<ul style="list-style-type: none"> <li>Government can add additional authority to bring those public corporations to the table that are currently ignoring PREPA</li> </ul>	<ul style="list-style-type: none"> <li>All public corporations have already been offered payment plans</li> </ul>
<p>Write-off past due balances with public corporations and pass deficiency to customers</p> <ul style="list-style-type: none"> <li>Could structure as a one-time amnesty for balances in existence as of June 2014</li> </ul>	<ul style="list-style-type: none"> <li>Resolves debt balances with public corporations for PREPA</li> <li>Would not require multi-year payment plan (i.e., PREPA could recoup funds quicker)</li> <li>Would not increase financial burden on the government of Puerto Rico</li> </ul>	<ul style="list-style-type: none"> <li>Increases electricity rate burden for public</li> <li>Does not address long-term sustainability of payments by public corporations if they are unable to afford current bills</li> <li>Would require legislation</li> <li>Public relations reaction to increased rates</li> </ul>
<p>Reduce rates for public corporations to match ability to pay, and pass deficiency to customers</p> <ul style="list-style-type: none"> <li>Rate adjustment could be retroactive to reduce existing debt balances</li> <li>Rates able to be adjusted upwards in future based on ability to pay</li> </ul>	<ul style="list-style-type: none"> <li>Resolves debt balances with public corporations for PREPA</li> <li>Addresses long-term sustainability of payments by public corporations</li> <li>Would not increase financial burden on the government of Puerto Rico</li> </ul>	<ul style="list-style-type: none"> <li>Increases electricity rate burden for public</li> <li>Could impact future behavior of public corporations if they felt this arrangement could happen again</li> <li>Would require legislation</li> <li>Public relations reaction to increased rates</li> </ul>

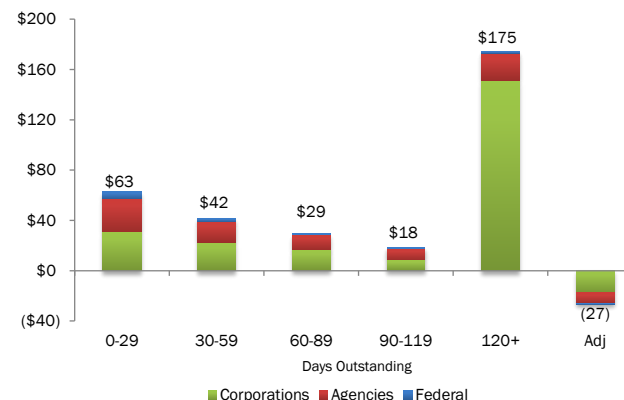
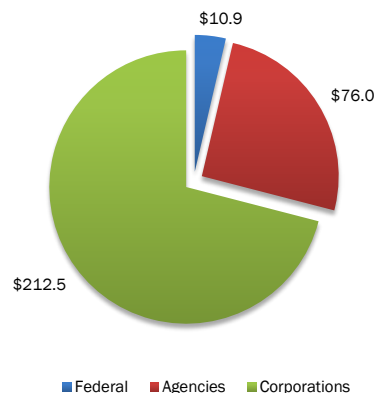
## Government Customer Overview

- PREPA's non-municipal government clients are classified in three categories based on the nature of services provided and sources of funding;
  - **Public Corporations** provide essential services to the island and produce their own revenue, but also receive financial support from the Puerto Rico Government and the Government Development Bank of Puerto Rico (GDB). The central government exerts influence over public corporations by appointing members to each board of directors
    - E.g., Ports Authority, Highway Authority, Water and Sewer Authority, University Hospital
  - **Puerto Rico Government Agencies** primarily receive funds from the Puerto Rico General Fund and provide services that do not produce revenues but are essential to the Commonwealth
    - E.g., Department of Education, Health Department
  - **Federal Agencies** are United States Government entities with locations or offices in Puerto Rico and receive federal funding
    - E.g., Veterans Association, U.S. Army, U.S. Post Office

PREPA Government Accounts Receivable as of 9/30/14 (\$ in millions)						
0-29 Days	30-59 days	60-89 days	90-119 days	120+ days	Adjustments	Net AR
62.6	41.7	29.2	18.0	174.6	(26.6)	299.5
21%	14%	10%	6%	58%	(9%)	100%

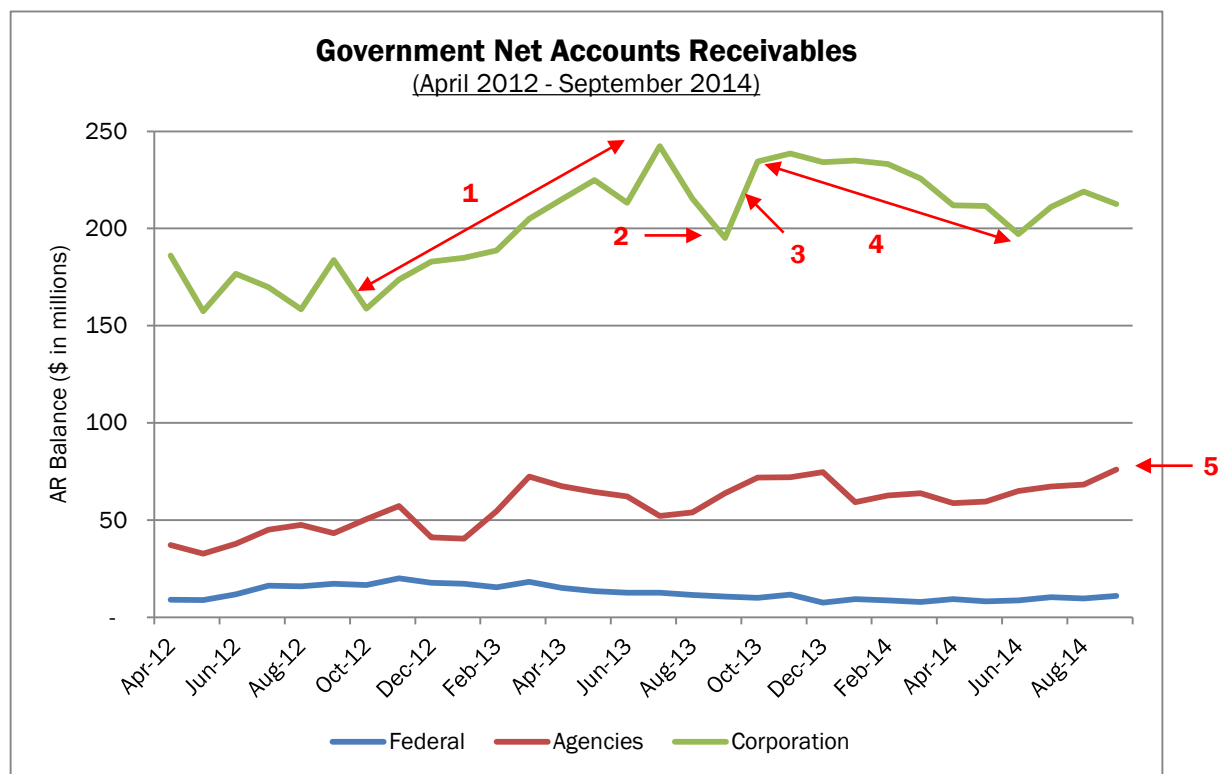
- For purposes of this section of the report, government customers do not include municipalities due to the treatment of electricity costs through CILT program
- Puerto Rico's public corporations and government agencies with the largest receivables balances represent a significant portion of the government bills owed to PREPA. The top 12 highlighted in this report comprise approximately 60-70% of total government receivables
  - Federal agencies are a small portion of the total government receivables and generally pay on time
- Government collections also represent a significant portion of PREPA's total cash collections, and changes to payment habits can have meaningful impacts on PREPA's working capital

**Government Accounts Receivable**  
**September 2014 (\$ in millions)**



## Trends in Government Receivables

The chart below shows the net accounts receivable balances for Puerto Rico government entities from April 2012 to September 2014.



1. Public corporations' accounts receivable balance increased by \$84 million from October 2012 to July 2013. In this time, the AR balances of the Department of Education, Medical Service Administration, Health Department, and Ports Authority increased significantly
2. Balance decreased by \$47 million in the following two months. PREPA received large payments from Tren Urbano and PRHTA during this time
3. October 2013 increase of \$40 million, driven by small payments from the Department of Education and Health Department compared to monthly averages
4. Decrease from October 2013 to June 2014 largely driven by a \$47 million decrease to PRASA's balance
5. The AR balance at Puerto Rico government agencies doubled from April 2012 to October 2014 (\$37 million to \$76 million)

# Puerto Rico Public Corporations

## Overview

- A majority of PREPA's outstanding receivables are owed from other public corporations of Puerto Rico. The public corporations are considered separate legal entities of the central government and generate revenues from the operations of their businesses

PREPA Accounts Receivable - Public Corporations as of 9/30/14 (\$ in millions)						
0-29 Days	30-59 days	60-89 days	90-119 days	120+ days	Adjustments	Net AR
30.8	22.6	16.8	8.6	151.5	(17.7)	212.5
15%	11%	8%	4%	71%	(8%)	100%

- The Central Government exerts influence on the public corporations through appointments of management and directors to each board
- Many of Puerto Rico's public corporations operate at a loss, and the shortfall at some of the corporations is funded by the central government through appropriations or a loan
- Many public corporations pay current bills to PREPA, but have large outstanding balances over 120 days old. Based on discussions with PREPA's customer service division, there is no payment plan for most of these balances or current intent by the public corporations to pay these amounts
- The public corporations do not prioritize payment to PREPA, and do not build up large accounts payable balances with other public corporations the same as with PREPA
- PREPA has the ability to file legal claims against other public corporations through an entity called the Commission to Resolve Debt Between Government Agencies (the "Commission to Resolve Debt"). PREPA has utilized this commission only once to resolve a debt with an agency
  - This process took 8 years, and resulted in a payment plan that was spread out over 14 years
    - During this process the examiner made comments that he felt PREPA should forgive the debt
- Bringing additional cases before the Commission to Resolve Debt is a fall-back option, if direct engagement with the government is ineffective

Public Corporation Balances as of June 30, 2013 (\$ in millions)

Payable Entity	Receivable Entity					PREPA % of Total	
	GDB	PREPA	PRASA	Other	Total	All	Excl. GDB
PRASA	90	58	-	-	148	39.1%	100.0%
PRHTA	2,047	23	2	9	2,081	1.1%	67.9%
Port Authority	215	32	6	3	255	12.4%	79.2%
Cardio	-	19	-	-	19	100.0%	100.0%
Solid Waste	74	5	-	5	84	6.5%	54.7%
National Parks	11	3	-	-	14	19.4%	100.0%
Other	940	39	5	105	1,089	3.6%	26.1%
<b>Total</b>	<b>3,378</b>	<b>178</b>	<b>12</b>	<b>121</b>	<b>3,690</b>	<b>4.8%</b>	<b>57.1%</b>

Source: FY 2013 Commonwealth of Puerto Rico Basic Financial Statements Required Supplementary Information



# Puerto Rico Government Agencies

## Overview

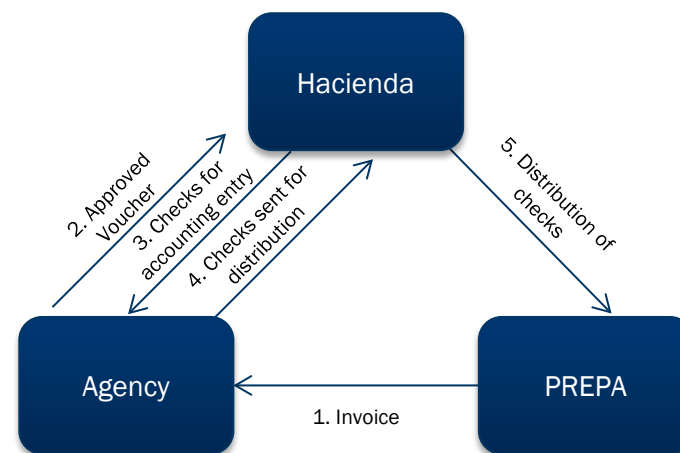
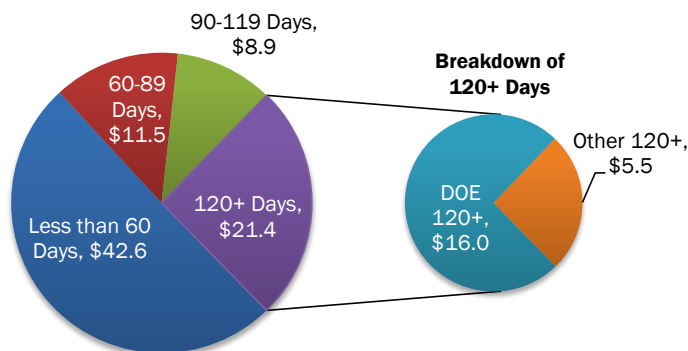
- A significant portion of PREPA's outstanding government receivables are owed from Puerto Rico's government agencies
- The government agencies operate under the executive branch of the Puerto Rico central government and provide services directly to the Commonwealth's citizens or oversee certain of the public corporations

PREPA Accounts Receivable - Puerto Rico Government Agencies as of 9/30/14 (\$ in millions)						
0-29 Days	30-59 days	60-89 days	90-119 days	120+ days	Adjustments	Net AR
26.3	16.4	11.5	8.9	21.4	(8.5)	76.0
35%	22%	15%	12%	28%	(11%)	100%

Number of Agencies with Balances Aged:				
<60 Days	60-89 Days	90-119 Days	120+ Days	Total
40	10	6	20	76
52.6%	13.2%	7.9%	26.3%	100.0%

- PREPA's aged balances can be partially attributed to either delays in approving the invoices by the agency or delays in transfers of cash from Hacienda
- Each agency's budget is set by the central government, and disbursements for operating expenses are made directly from the General Fund through Hacienda. The agency is responsible for approving PREPA's invoices and sending vouchers to Hacienda for payment
- PREPA provides estimated budget amounts for each agency on an annual basis based on historical usage. According to representatives from PREPA, these numbers are sometimes reduced in the final agency budgets
  - Another factor causing the aged balances is that some agencies make flat monthly payments at their budgeted amounts, which are below invoiced amounts from PREPA
  - Over a three month period from May to July 2014, Hacienda paid only \$11.6 million on \$14.0 (83%) of invoices from select agencies, not including the Department of Education and the Health Department
- PREPA has recently begun discussions with the Budget Office regarding past due amounts from agencies, with the Budget Office indicating it is trying to ensure payments are made timely and that past-due amounts are paid down

**Agencies Accounts Receivable**  
September 2014 (\$ in millions)



Note: process only applies to certain government agencies

# Power Shutoff Opportunities

## Overview

- PREPA's Customer Service Division completed a preliminary internal review of the government customer service agreements with overdue accounts receivable balances to determine if there are non-critical locations that can be shutoff
  - This review was an independent investigation performed by PREPA using their judgment, and did not include input from the government or public corporations
  - The Customer Service office used a conservative approach in identifying non-critical locations, and is continuing to refine the list (i.e., additional non-critical locations are expected to be added)
  - The initial list is not intended to be a complete set of non-critical service agreements, but rather a first attempt to shutoff power to send a message to other public corporations
- PREPA does not have a formal policy for determining non-critical locations or shutting off government clients
- A decision has not yet been made to proceed with cut-offs, but the Customer Service Division believes these service agreements are some of the least critical to the operations of the entities
- Each service agreement contains a receivable balance, however PREPA can shutoff power to a customer with overdue balances even if the non-critical service agreement has a zero balance
- Below is a summary of the locations identified as non-critical for potential shutoff;

(\$ in millions)	Number of Customers/SA's	Accounts Receivable	AR Percent of Total
<b>Total Government Customers</b>	288 Customers	\$299	100%
<b>Customers with Non-Critical Service Agreements</b>	8 Customers	\$39	13%
<b>Non-Critical Service Agreements</b>	30 Service Agreements	\$8	3%

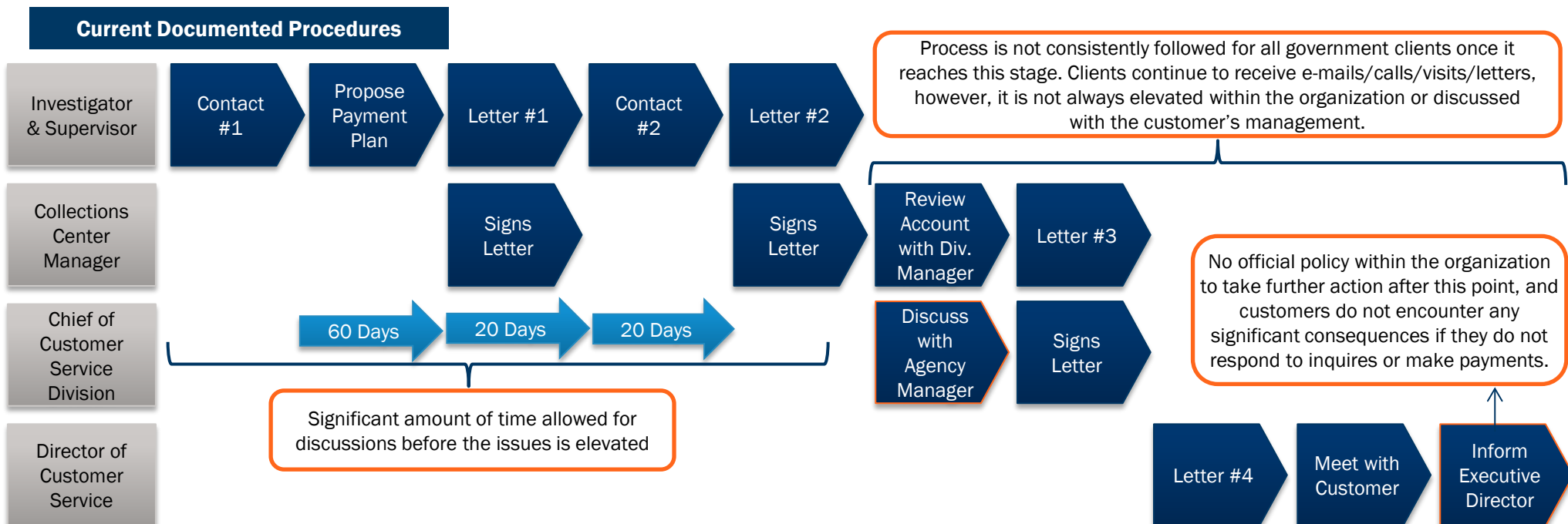
**PREPA needs to create and deploy a formal process to determine and record which service agreements at public corporations can be targeted for shutoffs. This process should be reviewed and approved by PREPA management and the Central Government**

# Government Collection Process

## Government Collection Process Overview

- PREPA's Customer Service Collection Center division has a unit dedicated to government clients. This unit is responsible for 288 government customers (including municipalities), and each customer has multiple accounts and service agreements. One client in particular has over 5,000 service agreements
- There are three union employees assigned to service the government clients; however, collecting receivables is only part of their job description. Other responsibilities include responding to client inquiries, fielding service requests, and writing statistical reports
- The official collection procedures were last updated in 2003
- Act 57 requires PREPA to prepare an updated policy regarding the collection of government receivables, which will be approved by the Energy Commission
  - The law specifically provides that these procedures should include the shutoff of power

### Current Documented Procedures



**There is significant opportunity to adjust the government collections process to include 1) shortened time period before issue is escalated, 2) customer shutoff in the policy, and 3) engagement with the Central Government for those entities that are consistently not paying. Compliance with process also needs to be tracked and enforced**



FTI Capital Advisors, LLC is a member of FINRA/SIPC.

## Review of Top 12 Government Accounts



# Department of Education

## Departamento De Educacion

### PREPA Accounts Receivable as of 9/30/14 (\$ in millions)

0-29 Days	30-59 days	60-89 days	90-119 days	120+ days	Adjustment	Net AR
9.6	6.8	6.8	7.0	16.0	(4.5)	41.6
23%	16%	16%	17%	38%	(11%)	100%

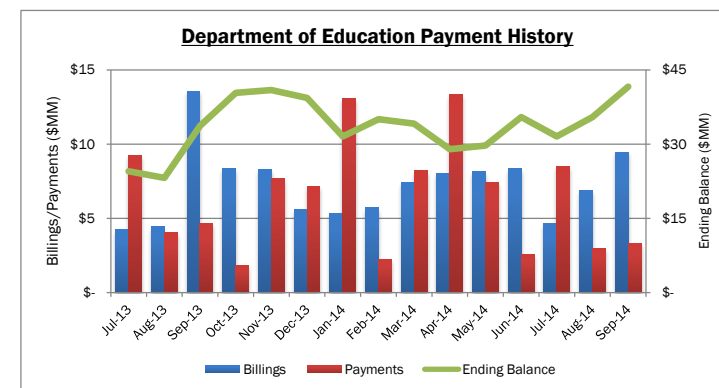
Balance as of 9/30/14, and will not include any payments made in Oct. or Nov. to date

## Overview

- The Puerto Rico Department of Education (“DOE”) contains eight school districts with 1,473 public schools and 450,000 students
  - PREPA has over 3,000 service agreements with the Department of Education
- The budget for the fiscal year 2012-13 was \$3.6 billion, which included \$2.1 billion received from the Puerto Rico General Fund, \$1.3 billion received from Federal Funds, and minimal amounts from other grants and organizations
  - The budget for “Facilities and Utilities Payments” was \$170 million for FY 2013, and PREPA officials have indicated that utility bills are under budgeted despite the fact that PREPA provides estimated annual amounts based on historical usage

## Current Situation

- The average monthly bill for DOE is \$6 million - \$8 million per month, with amounts driven by the season and the school year
- The Department pays its utility bill by approving invoices for Hacienda to pay, and then Hacienda pays PREPA
  - This process has historically caused invoices to be paid on a six month lag
  - DOE’s payment history has been consistent, with balances ranging from 4-6 months of outstanding invoices over the past two years
- In the last meeting with the DOE, in September 2014, the DOE indicated that it had sent ~\$20 million of invoices to Hacienda for payment
  - During October, PREPA received approximately \$10 million reducing the past due receivables



**The Department of Education receives a significant amount of its funds from the Puerto Rico General Fund, and is not an entity that is credit constrained. Although, the DOE has been paying consistently, PREPA needs to engage with the DOE and Hacienda regarding invoice processing and payment timing to reduce the 4-6 months of outstanding invoices**

# Water and Sewer Authority

## Autoridad de Acueductos y Alcantarillados

PREPA Accounts Receivable as of 9/30/14 (\$ in millions)

0-29 Days	30-59 days	60-89 days	90-119 days	120+ days	Adjustments	Net AR
15.2	10.2	7.3	2.4	10.9	(16.7)	29.3
33%	22%	16%	5%	24%	N/A	100%

Adjustments relate to preferential rate applied as part of Law 50

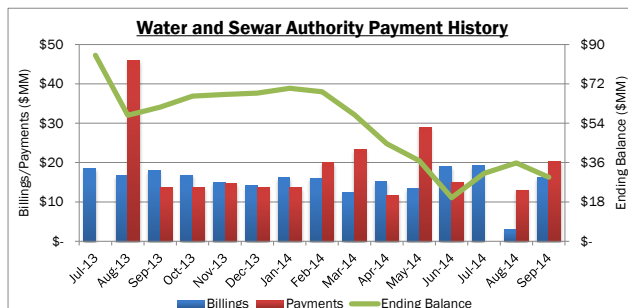
Balance as of 9/30/14, and will not include any payments made in Oct. or Nov. to date

### Overview

- PRASA owns and operates the Commonwealth's system of public water supply and sanitary sewer facilities. The Authority was experiencing financial issues due to low revenues and upcoming significant debt service payments
  - In July 2013, PRASA increased the rate it charges to customers by approximately 60%. The rate increase was designed to "generate enough revenues to cover the Authority's expenses and debt service until fiscal year 2017"
  - Preliminary estimates for FY2014 operating revenues are \$1.045 billion, which represents a \$300 million increase from \$736 million in FY2013. Additionally, preliminary estimates show PRASA generated \$385 million of operating income, and a \$65 million surplus after debt service
- In 2013, Act 50 was passed which required PREPA to provide PRASA a preferential electricity rate of \$0.22 per kWh given PRASA's financial situation and significant usage. The rate is subject to natural gas prices and decreases to \$0.16 per kWh in 2017
  - The decreased revenue from PRASA will not impact PREPA because the costs are passed through to other customers through the variable rate
  - Act 50 allows PREPA to modify or abandon the rate decrease in order to comply with bond obligations

### Current Situation

- PRASA has been making catch-up payments to become current on bills from PREPA. PREPA received \$14 million in September, and \$13 million in October to bring them current
- As of September 30, 2014, PREPA owed \$582,000 to PRASA for water and sewer services, which has not yet been paid



Key Metrics - FY2013 (\$ in millions)					
Balance Sheet			Income Statement		
Unrestricted cash	\$ 101.7	Accounts Payable	\$ 216.5	Operating Revenue	\$ 735.7
Restricted cash	417.8	Accrued Liabilities	116.7	Operating Expenses	(1,027.6)
Receivables	194.7	Bonds Payable	4,522.8	Operating Loss	(291.9)
Capital Assets	7,420.5	Notes Payable	469.7	Debt Service	(206.2)
Other Assets	95.0	Other Liabilities	364.5	Other Income	(253.2)
<b>Total Assets</b>	<b>\$ 8,229.7</b>	<b>Total Liabilities</b>	<b>\$ 5,690.2</b>	<b>Change in net position</b>	<b>\$ (459.4)</b>

**PRASA is largely paying current, but PREPA should continue to keep processes and communications in place to ensure PRASA makes timely payments on amounts owed, as PRASA has historically allowed balances to grow for a month or two before making catch-up payments**



# Train System Tren Urbano

## PREPA Accounts Receivable as of 9/30/14 (\$ in millions)

0-29 Days	30-59 days	60-89 days	90-119 days	120+ days	Total
0.7	0.7	0.7	0.6	18.6	21.2
3%	3%	3%	3%	88%	100%

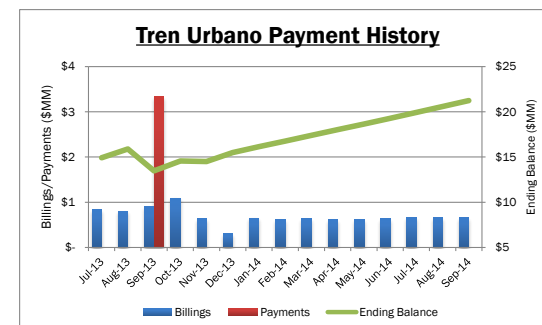
Balance as of 9/30/14, and will not include any payments made in Oct. or Nov. to date

## Overview

- The Tren Urbano (the "Train System") is part of the Puerto Rico Highway Transportation Authority ("PRHTA"), but receives a separate utility bill from PREPA. The train is single-line, 10.7-mile rapid transit system that serves the municipalities of San Juan, Bayamón, and Guaynabo. Tren Urbano includes 16 stations, a vehicle maintenance and storage facility, 74 rail cars, operations control center, traction power, train control, and communications systems
- There are eight utility service agreements with Tren Urbano, seven of which relate to the direct operations of the train, and one relates an administration office where the control system for the train is located

## Current Situation

- Due to low ridership and low fares, the train system operates at an operating loss each year
- The Train System's finances are managed by PRHTA, which also owes significant amounts to PREPA, and is in financial distress
- The train system continues to incur approximately \$600,000-700,000 per month in utility bills, and has not made any payments to PREPA since **September 2013**
- The Customer Service office attempted to shutoff power to the administrative offices in 2011, however, the issue was escalated by the Train System to the Central Government and no action was taken by PREPA
- Similar to PRHTA, PREPA has offered various payment plans to reduce the overdue balances, and suggested that Tren Urbano start by paying just a portion of its current balances
  - In response, the Train System has said that it does not have the resources to pay any amounts, and has indicated that it does not believe PREPA has any enforcement mechanisms against it
- Given the train system is controlled from the administrative offices, it is not believed that any of the service agreements would meet the non-critical criteria
- Recently House Bills 2212 and 2039 have been presented, which if passed, the expectation is that this would put Tren Urbano on a sustainable path that would allow it to cover current operating expenses



ATI - FY 2013 (\$ in millions)	
Train Fares	\$ 8.0
Other Revenue	1.1
<b>Total Operating Revenue</b>	<b>9.2</b>
Salaries and Benefits	1.7
Operating and Maintenance Costs	56.4
Integrated Transportation System	11.7
Repairs and Maintenance	4.4
Utilities	11.1
Other	6.9
<b>Total Operating Expenses</b>	<b>92.3</b>
<b>Operating Income (Loss)</b>	<b>\$ (83.1)</b>

**The Train System and PRHTA are not on a sustainable path, refusing to make even partial payments of current invoices, however Bills 2212 and 2039 if passed are intended to ensure they can cover their operating expenses. PREPA needs to engage the Central Government regarding how the obligations for these entities will be satisfied, and to ensure at least current bills are being paid**





# Port Authority

## Autoridad de los Puertos de Puerto Rico

### PREPA Accounts Receivable as of 9/30/14 (\$ in millions)

0-29 Days	30-59 days	60-89 days	90-119 days	120+ days	Total
1.8	0.8	0.8	0.8	36.7	40.8
4%	2%	2%	2%	90%	100%

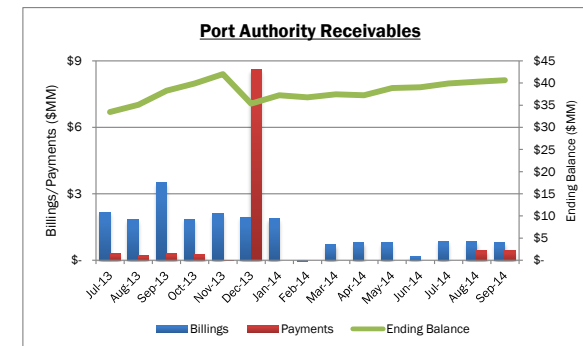
Balance as of 9/30/14, and will not include any payments made in Oct. or Nov. to date

### Overview

- The purpose of the Port Authority is to administer all ports and aviation transportation facilities of the Commonwealth and to render other related services. The Commonwealth generally provides financial support to the ports through legislative appropriations
- The Corporation oversees nine seaports and 12 airports around the island of Puerto Rico
- In 2012, the Port Authority and the Public Private Partnership Authority selected Aerostar Airport Holdings, LLC to serve as operator of the San Juan Airport. PPA received a \$615 million lump sum payment, and is expecting to receive \$552 million in revenue sharing over the life of the lease

### Current Situation

- From 2009 to 2011 the Ports paid minimal amounts to PREPA, and the outstanding receivable increased to \$60 million
- In 2012, the Authority used the proceeds of the privatization to significantly reduce the receivables balance, however, Ports again began making minimal/no payments until this summer
- Beginning this summer the Port Authority has been making regular monthly payment on the current portion of its bill (adjusted for the amount to be transferred)
  - There are no discussions at this time regarding the payment of the overdue balances once service agreements with the airport are resolved
- A portion of the receivable balance relates to meters belonging to the airport, and should be paid by Aerostar. PREPA and the Ports are close to completing work on separating the service agreements between the public agency and the private partnership. The delays in the process (over 1 year) affect the ability to collect the correct balances from the proper counter party
  - Based on this work, approximately \$10-11 million of past due receivables will be transferred from the Port Authority to Aerostar



Key Metrics - FY 2013 (\$ in thousands)	
Unrestricted Cash	6.4
Restricted Cash	108.8
Accounts Receivable	40.3
Total Assets	1,385.1
Accounts Payable	79.6
Due to Gov. Agencies	282.9
Bonds Payable	214.9
Total Liabilities	632.3
Deferred Inflows of Resources	619.4
Liabilities & Deferred Inflows	1,251.7
Revenues	176.0
Expenses	261.2

**PREPA's administrative delays in separating the service agreements between the Ports and Airport prevented the collection on a large receivable balance. PREPA should escalate with the Central Government how the past due amount will be paid down**





# Medical Service Administration

## Administración de Servicios Médicos de Puerto Rico

PREPA Accounts Receivable as of 9/30/14 (\$ in millions)

0-29 Days	30-59 days	60-89 days	90-119 days	120+ days	Total
0.5	0.5	0.7	0.5	17.2	19.5
3%	3%	3%	3%	89%	100%

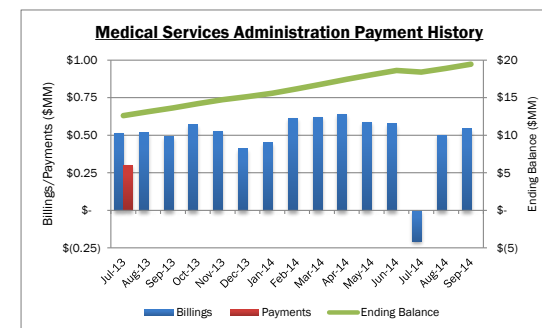
Balance as of 9/30/14, and will not include any payments made in Oct. or Nov. to date

### Overview

- The purpose of the Medical Service Administration (PRMeSA) is to plan, organize, operate, and administer the centralized health services, provided in support of the hospital and other functions, offered by the member intuitions and users of the medical complex known as the Puerto Rico Medical Center. The Commonwealth provides financial support to PRMeSA through legislative appropriations
- Sources of revenue include amounts charged and collected from private citizens, member institutions and municipalities for patient services. A large majority of these payments come from the Puerto Rico health care system

### Current Situation

- Based on FY2013 information, PRMeSA operates at significant loss, has little cash on hand, and no capacity under its credit facility with GDB
  - In 2013, the PRMeSA received \$47 million from the General Fund for debt service payments, capital projects and operating expenses
- In addition to PREPA, PRMeSA owes substantial amounts to PRASA and the University of Puerto Rico as a further indication of its financial situation and inability to pay other public corporations
- The Medical Service Administration's average monthly bill is \$500,000 and the last payment made was a partial payment of \$300,000 in **July 2013**
- In September of this year, PREPA offered several options for payment plans on PRMeSA's outstanding receivables, including an option to pay the balance off over eight years
  - PREPA did not receive a response to this offer or any follow-up emails
- In meetings with PREPA the financial director of PRMeSA claims the corporation does not have any money, and indicates they do not believe PREPA has any enforcement mechanisms as they are a critical care facility



Key Metrics - FY 2013 (\$ in thousands)	
Revenue	\$110.9
Operating Income (Loss)	(76.7)
Change in Net Position	(41.3)
Cash (Unrestricted & Restricted)	3.9
Insurance Premiums Receivable	12.5
Due from Gov. Corporations	29.6
Total Assets	107.7
Accounts Payable	29.7
Due to Gov. Corporations	39.2
Notes Payable	272.3
Total Liabilities	\$376.7

**PRMeSA receives incremental funding from the general fund to cover its obligations. PREPA should engage in direct discussions with the Central Government to ensure utility payments are included in this amount, and seek payment directly from the general fund for its obligations**



# Highway Authority Autoridad de Carreteras

## PREPA Accounts Receivable as of 9/30/14 (\$ in millions)

0-29 Days	30-59 days	60-89 days	90-119 days	120+ days	Total
0.7	0.4	0.4	0.4	10.8	12.8
5%	3%	3%	3%	85%	100%

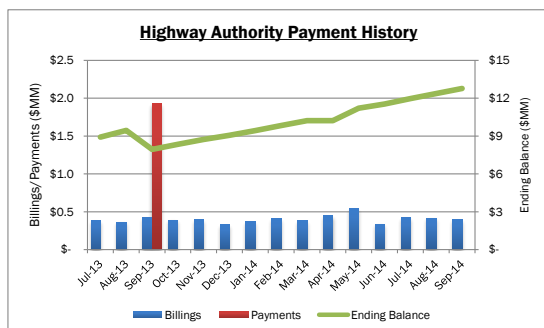
Balance as of 9/30/14, and will not include any payments made in Oct. or Nov. to date

## Overview

- The Puerto Rico Highway Authority is tasked to design, construct and administer toll roads and highways in the Commonwealth. The operating revenues are derived from the toll collections on the public highways and non-operating revenues consist of gasoline, diesel, oil, petroleum and vehicle taxes
- PRHTA, is a subsidiary of the Department of Transportation, and their administration office is responsible for paying the bills of both subsidiaries
- PRHTA utility bills relate to highway lights, traffic lights, toll stations and admin offices. PREPA has separate service agreements on all privatized roads

## Current Situation

- PRHTA is experiencing its own financial problems due to a significant amount of debt, including \$4 billion of public bonds and over \$2 billion owed to GDB
- PRHTA has an average monthly bill of \$400,000, and has not made a payment to PREPA since **September 2013**
- PREPA has asked for PRHTA to at least pay a portion of current invoices, but PRHTA has refused to make even such small payments
  - Consistent with the Train System, PREPA has had conversations with PRHTA where PRHTA has stated that it does not have funds to make any payments to PREPA, and that it does not believe PREPA has any enforcement mechanisms
- PREPA has identified several non-core locations for shut-down, and is also exploring the possibility of cutting-off power to toll stations operated by PRHTA
- Recently House Bills 2212 and 2039 have been presented, which would increase petroleum taxes, and permit the transfer of obligations to PRIFA, if passed the expectation is that this would put PRHTA on a sustainable path that would allow it to cover current operating expenses



Key Metrics - FY2013 (\$ in millions)					
Balance Sheet			Income Statement		
Unrestricted cash	\$ 23.3	Accounts Payable	\$ 193.8	Operating Revenue	\$ 184.9
Restricted cash	725.5	Accrued Liabilities	20.7	Operating Expenses	(314.4)
Receivables	45.3	Bonds Payable	4,732.8	Operating Loss	(129.5)
Capital Assets	11,160.0	Lines of Credit	2,045.1	Debt Service	(402.2)
Other Assets	96.2	Other Liabilities	646.7	Other Income	(57.2)
<b>Total Assets</b>	<b>\$12,050.2</b>	<b>Total Liabilities</b>	<b>\$ 7,639.1</b>	<b>Change in net position</b>	<b>\$ (459.4)</b>

**The Train System and PRHTA are not on a sustainable path, refusing to make even partial payments of current invoices, however Bills 2212 and 2039 if passed are intended to ensure they can cover their operating expenses. PREPA needs to engage the Central Government regarding how the obligations for these entities will be satisfied, and to ensure at least current bills are being paid**



# University Hospital

## Servicios Medicos Universitarios Inc.

**PREPA Accounts Receivable as of 9/30/14 (\$ in millions)**

0-29 Days	30-59 days	60-89 days	90-119 days	120+ days	Total
0.2	0.3	0.3	0.5	10.2	11.5
2%	2%	2%	4%	89%	100%

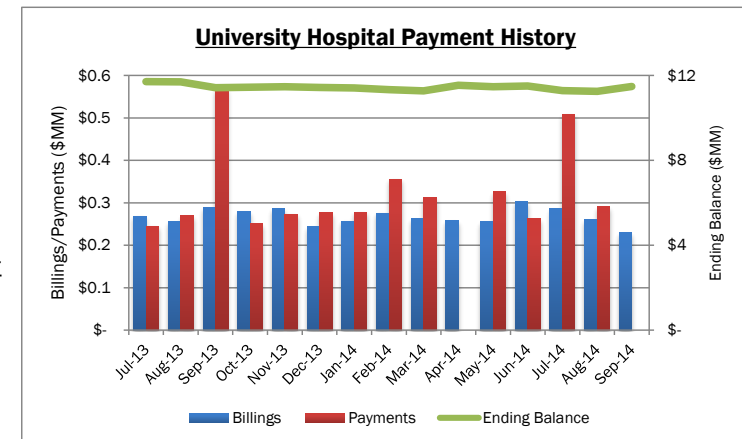
Balance as of 9/30/14, and will not include any payments made in Oct. or Nov. to date

### Overview

- Servicios Médicos Universitarios, Inc. (“SMU”) is a legally separate entity from the University and is governed by a separate board. SMU is a not-for-profit acute care corporation, organized under the Laws of the Commonwealth of Puerto Rico, on February 11, 1998, to operate and administer healthcare units. The principal objectives of SMU is to be the principal medical education institution of the University and to offer healthcare services to the residents of Puerto Rico. The University appoints a voting majority of the hospital board and is also financially accountable for the Hospital

### Current Situation

- In 2004, PREPA filed suit against SMU for non-payment of bills. The Court threw out the suit on the basis that the Commission to Resolve Debt Between Government Agencies (the “Commission to Resolve Debt”) was the proper venue for the complaint
- In 2005, PREPA filed a complaint with the Commission to Resolve Debt regarding the lack of payment by SMU. An examiner was appointed for the case
- PREPA and SMU engaged in settlement discussions regarding the outstanding debt and it was resolved that a 14-year payment plan would be put in place that required SMU to pay its current obligations each month, as well as \$50,000 related to its past due amounts beginning in October 2012
  - A driving force behind PREPA’s acceptance of this deal is that, after SMU demonstrated its inability to pay, the examiner told PREPA that he believed PREPA should forgive the past due debt
  - Two years into the agreement an assessment will take place to see if the monthly payment can be increased
  - SMU has been making its required payments under the payment plan
- SMU’s balance also includes one year past due (~\$600,000) related to the veteran’s hospital. This facility was privatized in July 2014, and bills have been transitioned to the private client. Currently, this balance is included in the Hospital’s payment plan



**PREPA should continue to monitor the payment plan, and engage in discussions with SMU in two years regarding ability to pay an increased amount, although it is unlikely this will increase the recurring payment**

# Public Housing Administration Administracion de Vivienda Publica

**PREPA Accounts Receivable as of 9/30/14 (\$ in millions)**

0-29 Days	30-59 days	60-89 days	90-119 days	120+ days	Total
1.4	1.4	1.4	1.2	7.2	12.7
11%	11%	11%	10%	57%	100%

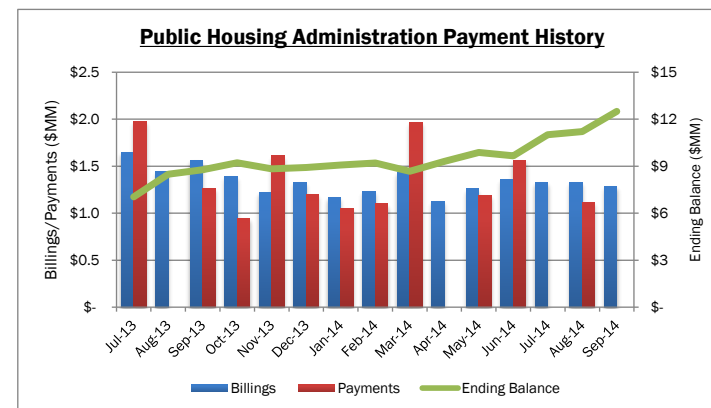
Balance as of 9/30/14, and will not include any payments made in Oct. or Nov. to date

## Overview

- The purpose of the Public Housing Administration (“PHA”) is to ensure the maintenance, rehabilitation and effective management of public housing projects to increase the availability of affordable housing, promote economic development and improve the quality of life of families to achieve self-sufficiency
- The Administration receives funds from the US Department of Housing and Urban Development, and was expecting to receive \$211 million for operating expenses in FY 2013
- The Administration is responsible for the electricity bills in the common areas and exterior of public housing

## Current Situation

- PHA’s bill averages \$1.3 million a month, and it has historically paid four months in arrears
- PREPA has been involved in a dispute with the PHA regarding service agreements that PHA claims are not servicing their properties
  - As a result of this dispute, for the past three years PHA has not been making payments on bills related to those service agreements, approximately \$250,000 a month
  - PREPA has been engaged on a meter-by-meter audit with PHA to resolve this dispute, verifying the actual property which each disputed service agreement covers
    - PREPA acknowledges that some of these disputed agreements are being incorrectly billed, however, based on its initial review it believes most of the agreements are valid
    - Recently, PREPA and the PHA were able to correct all issues related to disputed meters at a specific location, but this process is only successful when the problem is addressed in the field. This process is time consuming and unsafe at certain locations
- As each agreement is validated, PHA is paying off the full balance owed under these agreements, however, it is anticipated it could take up to an additional year in order to resolve all of the remaining agreements



**PREPA should continue to focus resources on completing the audit with PHA in order to complete the reconciliation of the disputed service agreements; and meet with PHA and Hacienda regarding streamlining the payment process**

# Solid Waste Authority

## Autoridad Desperdicios Solidos

**PREPA Accounts Receivable as of 9/30/14 (\$ in millions)**

0-29 Days	30-59 days	60-89 days	90-119 days	120+ days	Total
0.2	0.2	0.2	0.2	5.1	5.8
3%	3%	4%	3%	88%	100%

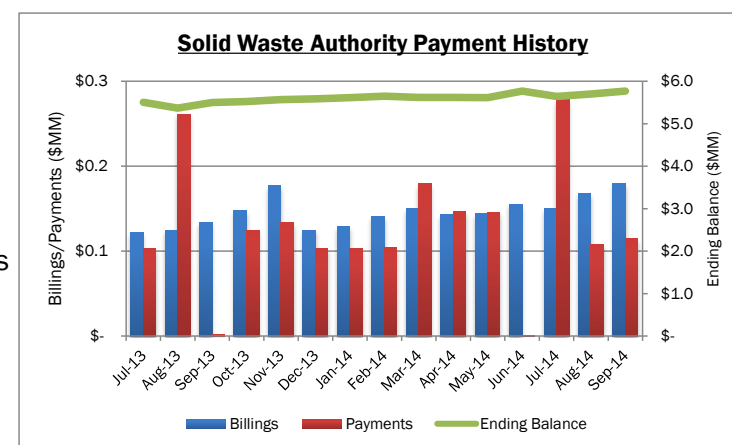
Balance as of 9/30/14, and will not include any payments made in Oct. or Nov. to date

### Overview

- The Solid Waste Authority (“SWA”) provides alternatives for processing of solid waste and encourages recycling, reuse, and recovery of resources from water. The Commonwealth provides financial support to SWA through legislative appropriations
- As of June 30, 2013 SWA had \$3.7 million of unrestricted cash on its balance sheet, and \$18.3 million of short term investments
- Total revenues in the year ending June 30, 2013 were only \$2.3 million, and expenses totaled \$28.4 million, leaving an operating deficit of \$26.1 million
- As of June 30, 2013, the Solid Waste Authority owed over \$84 million to other Puerto Rico public corporations. The majority of this balance, over \$74 million, is owed to the GDB. After the GDB, the largest payable balance is PREPA with \$5.5 million owed, and the remaining \$4.5 million is owed to other corporations

### Current Situation

- From 2004 to 2009, SWA made minimal payments on its electric bills and incurred approximately \$5 million of accounts payable with PREPA during that time
- The Customer Service office attempted to shutoff power to the Authority three years ago, and in response, the Authority agreed to pay all current balances. The Authority usually does not pay the entire balance on a monthly basis, but will make large catch-up payments in certain months
- SWA acknowledges the overdue balances prior to FY 2010 are due in full, however, it has stated it does not intend to pay these balances at this time given its current financial condition
  - The Customer Service office contacts the SWA every two weeks regarding the overdue balances, however, SWA is usually unresponsive
  - The SWA recently agreed to meet with PREPA to discuss the overdue balances and potential payment plans



**Given the aging of the past due balances, and the inaction of SWA, PREPA should engage the Central Government to mediate a payment plan for the past due balances**

# Cardiovascular Center of Puerto Rico and Caribbean Centro Cardiovascular de Puerto Rico y del Caribe



**PREPA Accounts Receivable as of 9/30/14 (\$ in millions)**

0-29 Days	30-59 days	60-89 days	90-119 days	120+ days	Total
-	0.3	0.3	0.3	15.8	16.6
0%	2%	2%	2%	95%	100%

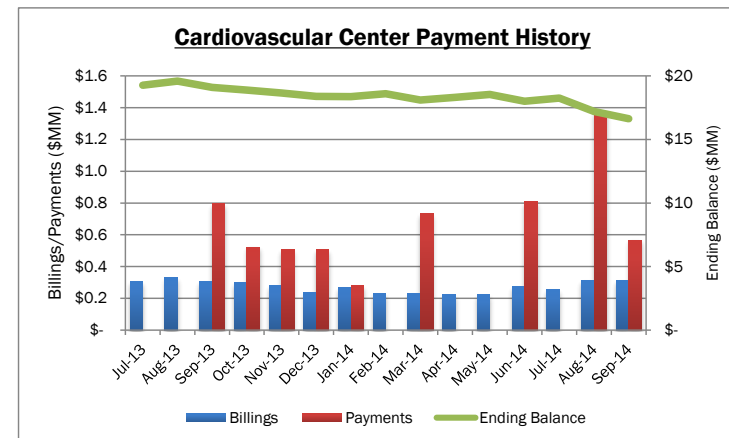
Balance as of 9/30/14, and will not include any payments made in Oct. or Nov. to date

## Overview

- The purpose of the CCCPRC is to provide special treatment to patients suffering from cardiovascular diseases. The Commonwealth provided financial support to CCCPRC through legislative appropriations
- In the year ending June 30, 2013, the Corporation received \$81 million of operating revenue and incurred \$89 million of expenses. It also received \$14.5 million from the Puerto Rico central government for a total in net position increase of \$6.6 million
  - To supplement its operating budget CCCPRC receives funds from the Puerto Rico government each fiscal year, sometimes in the form of a loan
- As of June 30, 2013, the Corporation owed \$18 million to PREPA and \$15 million to the Public Building Authority, but did not have any amounts outstanding to other public corporations

## Current Situation

- CCCPRC has a history of infrequent payments, with some in years, dating back to 2007, where PREPA did not receive any payments on invoices from this period
- Despite its funding from the Puerto Rico general fund, CCCPRC claims to PREPA that it does not have any ability to pay down its past due amounts
- Over the past year CCCPRC has been making regular payments, and has paid down the balance by approximately \$2 million over this timeframe
  - These payments are higher than invoices, as the CCCPRC is attempting to pay down a portion of the overdue balance, but will not commit to any formal payment plan, and guarantee a timeframe for paying it down
- The Corporation is a critical healthcare provider, and would be exempt from cut-off



**PREPA should work with the Central Government regarding a payment plan for CCCPRC, or include it as part of a broader solution**





# National Parks Company (NPCPR)

## Compania De Paques Nacionales

### PREPA Accounts Receivable as of 9/30/14 (\$ in millions)

0-29 Days	30-59 days	60-89 days	90-119 days	120+ days	Total
0.2	0.2	0.2	0.2	2.9	3.8
5%	7%	6%	5%	77%	100%

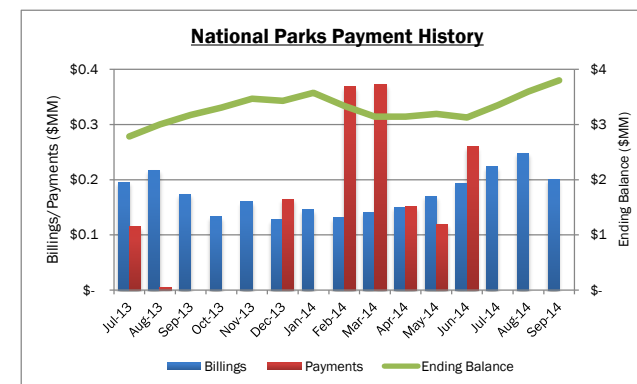
Balance as of 9/30/14, and will not include any payments made in Oct. or Nov. to date

## Overview

- The National Parks Company (“Parks”) is responsible for the operation of all national parks and the protection, conservation, maintenance and use of parks, beaches, forests, and natural and historical monuments for the optimum enjoyment of present and future generations. The Commonwealth provides financial support to the NPCPR through legislative appropriations.
- Parks is a government corporation and receives revenue from park entrance fees and other service charges
- Parks operates at a financial loss, but as of June 30, 2013 the parks owed money to only two Puerto Rico public corporations, approximately \$11 million to the GDB and \$2.7 million to PREPA

## Current Situation

- A majority of Parks’ past due payables (~\$2.5 million) relates to the non-payment of invoices from 2009
- During this past year, Parks made infrequent payments to PREPA, and the past-due balance has grown by approximately \$1 million
- Although Parks recognizes the outstanding balance, in discussions with PREPA it claims to have insufficient funds to pay prior balances, and will not agree to a formal payment plan
- Recent attempts to contact Parks have been unsuccessful, and PREPA does not receive responses from representatives from the corporation
- PREPA has identified non-critical service agreements with Parks, and will put pressure on the Corporation to pay its bills or potentially turn off power at certain locations



Key Metrics - FY13 (\$ in millions)			
Revenues	\$9.5	Unrestricted Cash	\$0.8
Expenses	36.1	Restricted Cash	11.5
Operating Loss	(26.5)		
Payments from Gov.	29.0	Due to Gov Entities	27.9
Change in Net Position	2.6	Long Term Liabilities	\$2.6

**PREPA should engage in a two path process and proceed with shutoff of non-critical locations while engaging the Central Government in discussions regarding past due amounts**

# Health Department Departamento De Salud

## PREPA Accounts Receivable as of 9/30/14 (\$ in millions)

0-29 Days	30-59 days	60-89 days	90-119 days	120+ days	Total
0.8	0.8	0.6	0.2	1.4	3.9
20%	20%	16%	6%	38%	100%

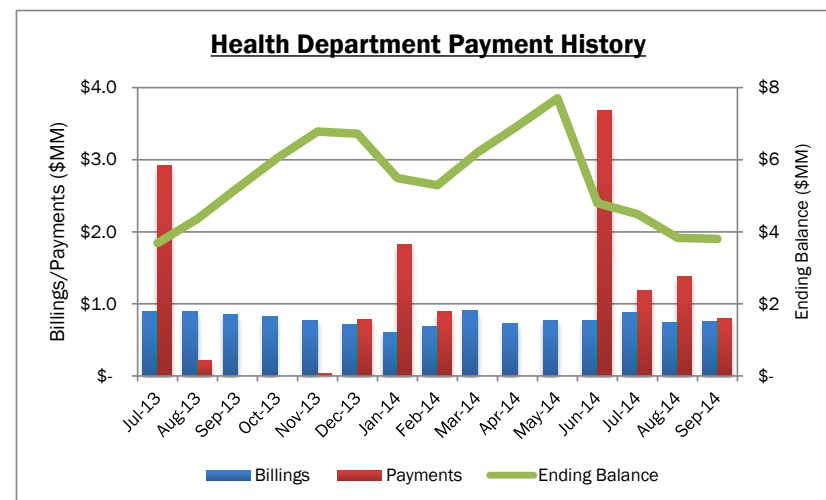
Balance as of 9/30/14, and will not include any payments made in Oct. or Nov. to date

## Overview

- The Puerto Rico Health Department is the primary regulator of health services in the Commonwealth, and is the supervisor of the island's public hospitals. The Department is classified as a governmental agency and is allocated funds from the Puerto Rico central government on an annual basis
- Spending in year ending June 30, 2013 was \$302.1 million versus an original budget of \$314.5 million

## Current Situation

- PREPA receives a recurring payment from Hacienda on behalf of the Health Department to cover the current monthly bills
  - The monthly bill is approximately \$700,000 - \$1 million
- The outstanding balance predominately relates to invoices from FY2012 when the Department paid only \$8.9 million on \$11.4 million of electricity bills. During this time, the Department did not have enough money in its budget to pay PREPA
- PREPA Customer Service informed the Department that it's responsible for amounts owed that are not paid by Hacienda
  - The representative from the Health Department responded by saying the Agency would not pay the outstanding amounts, and shortfall
  - Additionally, the Department representative claimed PREPA was not allowed to shutoff power due to the Department's critical nature
- The Customer Service office identified two service agreements it believes are not critical to the Health Department and could be shutoff



**The Health Department is a Puerto Rico government agency which receives funding from the General Fund, and is not credit constrained. PREPA should continue discussions with the Budget Office to ensure payment of past-due amounts.**





FTI Capital Advisors, LLC is a member of FINRA/SIPC.

CILT

## CILT Key Findings

### Key Findings

#### **The CILT Liability and Non-Payment by Municipalities**

- PREPA has accumulated a CILT Liability (CILT Expense in excess of allowed CILT Payments by PREPA) of approximately \$420 million as of FY 2014
  - The CILT Liability has occurred because of structural issues in PREPA caused by some combination of rates, expenses, and capital structure which has left insufficient funds in the Trust waterfall to cover a CILT obligation that is 5% of revenues
- Although PREPA has the right to offset CILT Payments against amounts owed to PREPA by the municipalities; municipalities are legally required to pay the remaining amounts to PREPA
  - PREPA provides municipalities with a bill each month; however, municipalities have not historically paid, and PREPA has not historically taken further action to pursue collections from municipalities
  - **As of June 2014, the amount of receivables owed by the municipalities that has not been offset is ~\$420 million**

#### **CILT and Similar Programs (PILOT) are Common for Public Utilities**

- Although public utilities in the U.S. are tax exempt, 88% of U.S. public utilities with over 50,000 customers make Payments in Lieu of Taxes (“PILOT”) payments or other direct payments to local governments<sup>1</sup>
- The median spend on PILOT or similar programs for U.S. public utilities with greater than \$100 million in revenues is 6.4% of revenues (with the 3<sup>rd</sup> quartile at 10.1%)<sup>2</sup>, which compares favorably with CILT at 5% of revenue for PREPA
  - Even when analyzed on the basis of kWh’s produced, PREPA’s CILT Expense although on the high side, is in line with the largest public utilities
  - If enforced, the Act 57 cap on municipal power consumption allowed to be applied to CILT will further reduce CILT Expense
  - Comparable public power providers have rate, expense and capital structures that can support the amount of PILOT payments, whereas, PREPA’s structure can only support CILT Payments that have averaged 70% of the CILT Expense
- Most PILOT program payments are calculated as a percentage of revenue, as a fixed amount, or as a property tax equivalent
  - The calculation of CILT based on municipal usage, including public lighting, is not standard
    - This creates a disincentive for municipalities to responsibly manage their electricity consumption
  - For U.S. public utilities, only a small amount of overall payments/provision of services to local and state governments is in the form of free service to government entities<sup>2</sup>; the non-cash nature of CILT is inconsistent with the practice of most U.S. public utilities

#### **Key Issues with CILT Need To Be Clarified with the Energy Commission**

- Per Act 57, the Energy Commission will serve as the governing body to interpret and approve regulations regarding the implementation of CILT
- PREPA’s interpretation of CILT and its policies with respect to accounting and collections efforts with municipalities will need to be confirmed with the Energy Commission when it is fully formed

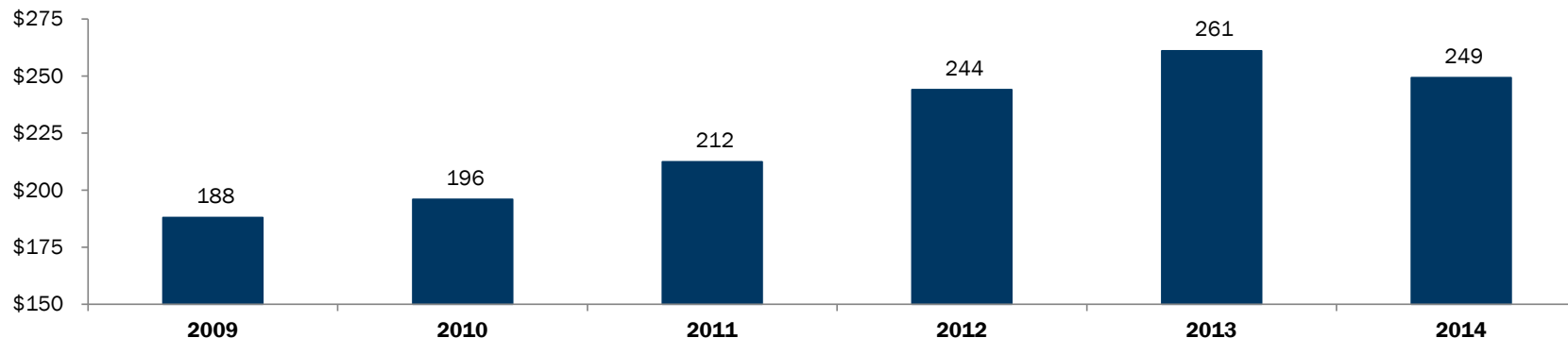
1. APPA study, “2010 Governance Survey”

2. APPA study, “Payments and Contributions by Public Power Distributions Systems to State and Local Governments, 2012 Data”

## CILT Overview

- PREPA's mandate includes "the conservation of natural resources, the improvement of the general welfare, and the promotion of commerce and prosperity", and as a public corporation is exempt from all municipal and Commonwealth taxes and assessments
  - This is consistent with the treatment of other public utilities in the United States, which are exempt from property and income taxes
- Although tax exempt, typically public utilities, including PREPA, will pay to municipalities, or state governments, CILT or PILOT to compensate the municipalities for forgone revenue
  - Based on APPA survey data, 88% of large public utilities in the United States make PILOT or CILT payments, or provide services to local governments in lieu of tax payments
- For PREPA, CILT expense has historically been calculated based on the cost of actual power consumed by municipalities including public lighting, which does not provide an incentive for municipalities to manage their consumption
  - There also historically have been issues with municipalities operating businesses in municipal facilities, with their consumption of electricity included in CILT expenses rather than being paid
    - An opportunity exists for PREPA to audit these municipal corporations to determine if any of them utilizing municipal facilities should be considered for-profit corporations or businesses under Act 57 and should be excluded from municipal consumption in calculating CILT
  - As a result of the disincentive for municipalities to cut-back on their electricity usage, CILT expense grew at a compound annual growth rate of 9% from 2008 through 2013, far in excess of PREPA's revenue growth rate of 4% over that time period
- Act 57 revised the calculation for CILT to provide an incentive for municipalities to manage their power consumption

**CILT Expense (incl. Public Lighting)**  
(\$ in millions)



1. Act No. 57-2014, the Puerto Rico Energy Transformation and Relief Act  
2. APPA study, "Payments and Contributions by Public Power Distribution Systems to State and Local Governments, 2012 Data"

## Calculation of CILT – Act 57

- Under Act 57, PREPA's CILT obligation is calculated based on actual usage of each municipality, including public lighting, for the fiscal year, subject to a cap
  - Each municipality's usage is capped at the average of the highest three years of consumption, on an annual kilowatt-hour basis, since 2004
    - This amount excludes public lighting, which may be included if requested by a municipality
  - The cap is reduced by 5% per year for each of the next three years, for a total of 15%, and municipalities will be required to pay for incremental usage above the cap
    - As an incentive to further reduce usage, PREPA is required to pay municipalities for 40% of any savings they achieve in excess of the 5%
      - This will benefit PREPA as its variable costs are in excess of 40% of revenue
    - The cap can be adjusted upwards based on new residential/commercial developments in a municipality, so long as such development is deemed efficient based on the requirements established by the Commonwealth Energy Public Policy Office
      - The exact mechanism for this needs to be determined
  - Any for-profit businesses that utilize municipal facilities are not included in CILT expense; these businesses are required to pay for their electricity usage

### Estimate of Impact of Cap on Municipal CILT Expense - Per Act 57

#### **Reduction of Municipal Consumption (MWh)**

Year 1	33,346
Year 2 (cumulative)	57,603
Year 3 (cumulative)	81,859

#### **Reduction of Municipal Consumption (\$ in millions)**

Year 1	\$9.3
Year 2 (cumulative)	\$16.1
Year 3 (cumulative)	\$22.9

Note - Calculation is an estimate and needs to be refined with Energy Commission

Note - Assumes rate of \$0.28 per kWh

**Enforcement of the 5% cap, and PREPA's ability to take action against municipalities who do not pay for excess consumption will be critical, as historically municipalities have not made any payments for electricity usage**

## Calculation of CILT – Act 57(Continued)

■ Act 57 defines the calculation of CILT as follows:

- 9% of fuel adjustment and purchased power surcharge is to be allocated first to the payment of certain subsidies authorized by law, and then for the payment of CILT
  - Any excess amounts remaining of the 9% are to be utilized for the Rate Stabilization Fund
  - Rate Stabilization Fund is to be used to manage fuel volatility, support infrastructure changes for renewables, encourage conservation and energy efficiency, with an emphasis on improvement of grid. Excess can be used for Capital Improvement Program

(\$ in millions)	2011	2012	2013	2014
Base Rate	\$1,087	\$1,079	\$1,114	\$1,097
Fuel Adjustment	2,579	3,182	2,862	2,633
Purchased Power	740	766	845	904
Total Revenues	4,406	5,027	4,821	4,635
9% Fuel Adjustment/Purchased Power	299	355	334	318
Subsidies <sup>(1)</sup>	39	44	44	37
CILT	212	244	261	249
Subtotal Subsidies and CILT	251	288	305	286
<b>Excess / (Deficiency) to 9% Limit</b>	<b>\$ 47</b>	<b>\$ 67</b>	<b>\$ 29</b>	<b>\$ 32</b>
Memo: Other Subsidies <sup>(2)</sup>	\$ 33	\$ 33	\$ 38	\$ 35

9%

9% allocation is insufficient to cover all subsidies

(1) Limited to residential fuel subsidy, hotel subsidy program, rural electrification and irrigation subsidy, and credit to reduce electric energy as described in Act 57.

(2) Excludes preferential rate agreement for PRASA.

- If PREPA's net income is insufficient to make the required CILT Payments, then the amount may be carried forward for up to three years
  - As of June 2014, PREPA had on its books a carryforward (the CILT Liability) of \$421 million
- Receivables from municipalities may be set-off against CILT Payments in a given year

■ Subsidies and CILT expense has been near the 9% cap for the prior two years

■ Act 57 does not indicate that municipalities can forego payments on billed amounts beyond PREPA's ability to set-off receivables against current year's CILT Payments

## Calculation of CILT – Impact of Act 57

### Act 57

#### Calculation of CILT Obligation

- Strictly based on usage of municipalities, subject to a cap
- Cap based on average of three highest years of power usage since 2004
- Requirement to reduce cap by 5% for three years, 15% in total

#### 11% of Surcharge

- Based only on fuel adjustment and purchased power surcharges
- 2% is to be used to create a rate stabilization fund
  - Depending on the final interpretation of the Commission regarding the permitted usage of the rate stabilization fund, this could have an impact of \$75 million a year to the general fund
- 9% is allocated first for subsidies and then for CILT expense
- Excess amounts of the 9% are to be used for the rate stabilization fund, and the operating costs of the Energy Commission

#### Subordination

- Certain language regarding subordination of CILT obligations to bonds was removed in Act 57, though ultimate impact is likely unchanged

#### Energy Commission

- Formation of Energy Commission
- Energy Commission is required to approve regulations regarding the implementation of CILT
- Would be governing body for resolution of issues of implementation and enforcement of CILT

### Prior to Act 57

- Previously CILT was based on the maximum of three different factors
  - 20% of adjusted net revenues (as defined in the 1974 Trust Agreement, less the cost of Commonwealth rate subsidies);
  - Cost of actual power consumed by municipalities; or
  - Prior 5-year moving average of CILT paid to the municipalities
- In recent years, the cost of actual power consumed was the factor that determined CILT expense

- Based on total revenue
- 11% allocation first for subsidies and then for CILT expense
- Excess amounts could be used to finance the capital improvement program or for general corporate purposes

- CILT obligations were explicitly subordinated to bond obligations

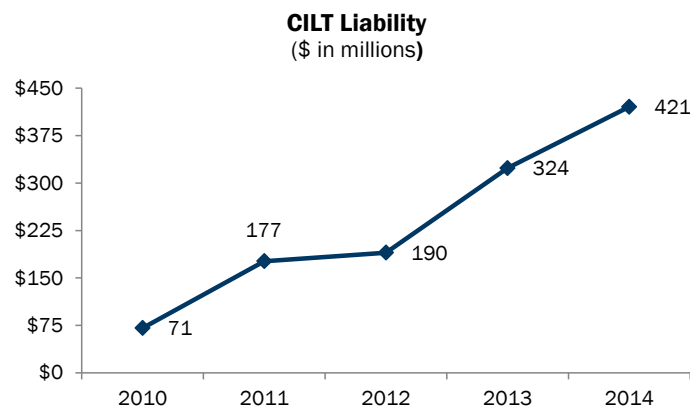
- Not in effect

## CILT - Trust and Accounting Mechanics

- Per the PREPA Bond Trust Agreement, revenues are generally to be used: first for current expenses, then for the payment of debt service, then to various reserve accounts, and lastly to the capital improvement fund
- Payment of subsidies and CILT may be made after those described above. Below is the 2013 audited calculation of CILT:

(\$ in millions)	<b>FY 2013</b>
Net Revenues	\$ 725
Less - Requirements Under Trust Agreement:	
Sinking Fund - Interest	333
Sinking Fund - Principal	195
Reserve Account Fund	-
Reserve Maintenance Fund	-
Subordinate Obligation Fund	-
Self-Insurance Fund	-
Capital Improvement Fund	17
Subtotal	545
Amount Available for Subsidies and CILT	181
Less - Subsidies	42
<b>Amount Available for CILT Payments</b>	<b>\$ 138</b>

- To the extent there is a difference between the amount of CILT expense, and the amount of CILT Payments allowed to be paid under the Trust Agreement, a CILT Liability is recorded for the amount of the difference owed to the municipalities
  - Per Act 57, this deficiency can only be carried forward for three years



## CILT - Trust and Accounting Mechanics (continued)

- PREPA's simplified<sup>(1)</sup> illustrative accounting for CILT is below (note that this accounting is prior to the August 2014 Forbearance Agreements, which do not permit offset of CILT expense during the forbearance period):

### Step #1: Recognize Revenue and Expense

The following are recognized upon recognition of revenue:

- revenue and CILT expense
- accounts receivable related to the revenue and a liability related to the expense

#### Simplified Facts

CILT expense per GAAP = Municipality revenue

Municipality revenue = \$100

	<u>Initial</u>
<b>GAAP Income Statement:</b>	
Revenue	100
Expense	100
Impact to Net Income	0
<b>GAAP Balance Sheet:</b>	
Accounts Receivable	100
Liability for CILT	100
Impact to Net Assets	0

### Step #2: Effectuate Setoff in Amount Required by Trust Agreement to Satisfy CILT Expense

The Authority will setoff AR and liabilities in the amount allowed by the trust agreement; resulting in:

- a reduction in accounts receivable
- a reduction in liabilities

#### Simplified Facts

CILT expense per Trust Agreement = \$25

	<u>Initial</u>	<u>Setoff</u>	<u>Ending</u>
<b>GAAP Income Statement:</b>			
Revenue	100	N/A	100
Expense	100	N/A	100
Impact to Net Income	0	N/A	0
<b>GAAP Balance Sheet:</b>			
Accounts Receivable	100	(25)	75
Liability for CILT	100	(25)	75
Impact to Net Assets	0	0	0

- PREPA only books an "offset" to the municipalities' accounts receivable to the extent of the allowed CILT Payment

1. Accounting entries are simplified and grouped for presentation purposes, and do not reflect actual entries made.  
2. FTI did not perform an audit of the support for PREPA's accounting entries.



## CILT Set-Off

- One key issue with CILT is the perceived set-off of amounts owed by municipalities with the CILT Liability
- Act 57, and prior law, gave PREPA and the municipalities the ability to set-off CILT Payments in a given year with the amounts owed to PREPA by municipalities, subject to certain conditions
- PREPA's accounting for CILT, as previously reviewed, takes this into account by offsetting accounts receivable with the allowed CILT amounts
  - However, PREPA does not set-off for municipal billings in excess of CILT Payments, and keeps these in accounts receivable with an equal amount owed as a CILT Liability
    - As of June 2014, this amount was approximately **\$420 million**
- PREPA also provides each municipality with a billing statement each month showing the amounts due by the municipality, with remittance information for payment
  - PREPA historically had not made any additional collections efforts on these billed amounts
- As a practical matter, municipalities do not pay the amounts owed (in excess of those set-off), as provided in their monthly billing statements. However, this is inconsistent with applicable law, which does not provide for non-payment of amounts in excess of allowed CILT Payments in a given year
  - Had the municipalities paid these amounts, PREPA would have collected an additional approximately \$420 million of cash

**The municipalities should be paying the accounts receivable in excess of the allowed CILT. This amount was approximately \$420 million as of June 2014.**

## CILT Benchmarking

- In its review of PREPA's CILT obligations, FTI performed an analysis of CILT versus similar programs at other U.S. public power utilities. FTI reviewed:
  - Industry surveys on payments to government entities by public power utilities
  - Annual reports, audited financials, local statutes, and bond offerings for all public power utilities in the U.S. with over \$2 billion in annual revenue
- Key findings of the benchmarking analysis are:
  - **Frequency**
    - **88%** of U.S. public power utilities with over 50,000 customers make PILOT or similar payments to government entities<sup>(1)</sup>
  - **Size of Payments**
    - The median PILOT spend for public power utilities with greater than \$100 million in revenues was **6.4%** of total revenues (with first quartile at 5.0% and 3<sup>rd</sup> quartile at 10.1%)<sup>(2)</sup>, versus 5.2% for PREPA
    - For public power utilities with revenue over \$2 billion, the average spend was **8.5%** of total revenues, versus **5.2%** for PREPA
    - Given the high electricity rates in Puerto Rico relative to the rates in the sample, FTI also evaluated this in relation to MWh sold, which averaged \$10 of PILOT or similar payments per MWh sold (with a range of \$4 to \$16), versus \$14 for PREPA
  - **Formula for Determination**
    - Based on the APPA survey data, most public power utilities determine the amounts of such payments based on either a percentage of revenue/net income (**34%**), flat amount paid annually (**17%**), a property tax equivalent (**13%**), or as a charge per kWh sold (**12%**)<sup>(2)</sup>
    - For the public power utilities with over \$2 billion in revenue, payments were generally based on a targeted percentage of revenue, or on property assessments
    - From the APPA survey data, only **6%** of PILOT or like payments made to government entities were in the form of free or reduced rate electrical service<sup>(2)</sup>
  - **Priority of Payments**
    - In its review of the public power utilities with revenues greater than \$2 billion, FTI found that for all of them PILOT and like payments were either subordinated to bond debt in the waterfall of payments; or there was a covenant that limited payments to ensure adequate coverage was available

**Based on the research completed, FTI finds that CILT and similar programs are common for tax exempt utilities in the U.S. and that the amount of CILT obligations are reasonable both as a percentage of revenue and in relation to MWh sold. Unique to CILT are the determination based on municipal consumption, and the non-cash nature of CILT, particularly the non-payment of bills by municipalities in excess of the CILT payment amount.**

Note – Surveys reviewed and utilized in this report include the APPA "Governance Survey", and the APPA survey "Payments and Contributions by Public Power Distribution Systems to State and Local Governments, 2012 Data". Multiple years of these reports were reviewed.

1. APPA study, "2010 Governance Survey"

2. APPA study, "Payments and Contributions by Public Power Distributions Systems to State and Local Governments, 2012 Data"

## Comparison to Top U.S. Public Power Utilities (>\$2B of Rev.)

	PREPA	LIPA (New York)	Los Angeles Department of Water and Power	Salt River Project (Arizona)	CPS Energy (San Antonio, TX)
<b>Annual Revenue<sup>(1)</sup></b>	\$4.8 billion	\$3.7 billion	\$3.1 billion	\$2.9 billion	\$2.3 billion
<b>Electric Sales (millions MWh)<sup>(1)</sup></b>	17.9	19.9	25.0	32.9 <sup>(2)</sup>	28.8 <sup>(2)</sup>
<b>Payments in Lieu of Taxes (or other payments/services to government)<sup>(1)</sup></b>	\$252 million	\$322 million	\$252 million	\$144 million	\$285 million
<b>Payments to Gov't as % of Revenue</b>	5.2%	8.8%	8.1%	5.0%	12.2%
<b>Payments to Gov't per MWh of sales</b>	\$14	\$16	\$10	\$4	\$10
<b>Nature of Payments and Formula for Determination</b>	Based on actual municipal power consumption; capped at 9% of fuel and purchase power revenue (after subsidies)	PILOT payments based on assessed property	No formula, but in practice it is targeted at 8% of revenue. Subject to Board approval based on financial condition in year payment is made	Voluntary payments in lieu of taxes, calculated based on property as though it was a private utility corporation	Cash payments and refund of gas and electric services, capped at 14% of revenue
<b>Priority in Funds Flow / Bond Covenants</b>	Excluded from current expenses	Payments to the PILOT fund come after operating expenses and debt service in the flow of funds	Subject to covenants in the bond indentures such that may not exceed increase in net position from prior year (before transfer to the City)	Explicitly excluded from operating expense calculation; subordinated in funds flow to debt service	Subordinated to all payments (e.g., operating costs, debt service)

1. Based on 3 year average  
2. Includes significant wholesale revenue